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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

EDITED BY

PROFESSOR G. F. STOUT,

WITH THE CO-OPERATION OF PROFESSOR E. B. TITCHENER, AMERICAN EDITORIAL REPRESENTATIVE, AND OF DR. E. CAIRD, PROFESSOR WARD, PROFESSOR PRINGLE-PATTISON, AND OTHER MEMBERS OF AN ADVISORY COMMITTEE.

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MIND

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OF

PSYCHOLOGY AND PHILOSOPHY

I.—THE LOGICAL FOUNDATIONS OF MATHEMATICS.

By R. B. Haldane.

In a paper which appeared in Mind for April last Mr. Bertrand Russell reviewed an Address which I delivered in October, 1907, as President for the year of the Aristotelian Society.[1] In the course of this review he restated certain propositions, of much importance both in mathematics and in logic, with which he had associated his name in his book on the *Principles of Mathematics.* About that book I should like to make an observation at the outset. I am not competent to judge of its value as a contribution to the science of pure mathematics. But it does not require much technical knowledge in a general reader to enable him to appreciate the breadth of treatment and firmness of grasp which the book displays. It is of rare occurrence in the domain of abstract thought to find any one possessed at once of the philosophical and the mathematical attainments which are Mr. Russell's, and it is very satisfactory that such a writer should have arisen in these islands, where this kind of combination of gifts is still less frequent than it is abroad.

It is about the main thesis of the book that I wish to say something in this paper, and as this thesis lay at the root of what Mr. Russell said in his review in Mind of my address, I will first restate the point of controversy. I had said that modern developments in logical theory, particularly those relating to the meaning of the conception or category of

[1] Published by the Society under the title *The Methods of Modern Logicians and the Conception of Infinity.*

Quantity, had a close bearing on such branches of mathematics as the differential calculus. I instanced the confusion of thought which led Leibnitz and some of his contemporaries to treat infinitesimals as minute discrete quanta, the magnitude of which might be disregarded, just as that of a grain of sand might be disregarded when estimating the size of the ocean. Such procedure and its consequences meant, as D'Alembert long ago said, the ruin of the geometrical exactness of the calculus. It is fatal to pretend that a circle is a polygon with very small sides. I cited illustrations from recent text-books which showed that ideas of this nature are still the occasion of much unnecessary obscurity in the minds both of the teacher and the taught. Quantity is a highly general conception which lies (so I stated, but I do not think that Mr. Russell agrees) at the very root of mathematical reasoning, and quantity has two aspects, each of which implies and is inseparable, both in thought and in existence, from the other, continuity and discretion. The conceptions of number and magnitude, which arise out of the judgment of quantity, are therefore at once both continuous and discrete in their implications. Had this been realised at the beginning, the so-called infinitesimal calculus might from the first have been consistently treated as a science not of infinitesimals but of rates. But even when the advance has been made of regarding quantity as presenting the aspect of continuous change care is requisite before the term "rate" is employed. For I pointed out that when we speak of "rate," we generally have in our minds a complex idea of which the elements are time and change, but that (so I went on in the Address) "where one uniform rate is compared with another, without regard to absolute values, as in dy/dx, the symbol of the differential co-efficient, the idea of time may be left out of the question, and the comparison may be made through that of the simultaneous changes of the two rates themselves. Thus the ratio of the simultaneous increments of any two variables which increase at constant rates, does in fact perform a double office, representing not only the ratio of their changes, but also that of their rates of change, which will of course be constant. Just because of this characteristic, the rates at which the quantities may be changing are not affected when their values become zero, and may pass from *plus* to *minus* quantities. The equation $^0/_0 = a$, thus has a meaning; a may be the ratio, not only of quantities or of their increments, but also of these rates of increase, and therefore, when applied to the so-called increments with which the differential calculus deals, a must in-

dicate the ratio of the rates of change of their increments as they pass through the zero point of their value. dy/dx is thus a symbol which represents, not actual or separable minute quantities, but simultaneous rates of change in x and a function of x. Apart from their relation to each other, dy and dx are non-existent; they have reality only as factors or moments in a relationship which belongs to the continuous aspect of quantity. Thus it is only as symbolising rates of change in certain aspects of magnitude that curves may be treated as though made up of lines. The relationship of the differential co-efficients of such magnitudes is to be conceived as existing, neither *before* they disappear, nor *after*, but as the relation *with which* they disappear. In virtue of the principle of continuity the vanishing magnitudes still retain the ratio which characterises their relative rates of change. It follows that the transition from the function of a variable to its differential must be regarded as no difference by so much, but as a reduction of the finite function to the qualitative relation of its quantitative factors. What is present is in reality only the qualitative relation of quantitative *principia*, which, as being *principia*, are factors but not quanta. Thus we get rid of the 'beyond' of the false infinite of quantity taken as discrete. It is by grasping truths of this class that we rid ourselves of the limitations by which the science of quantity, assumed to possess a merely discrete character, is confused, and gain the free use of the great instrument of analysis which the genius of Newton and Leibnitz has placed within our grasp. In the notions themselves which underlie the calculus there is nothing particularly abstruse. It is the confusion of ideas which logically imply different categories that makes this branch of mathematics seem a mystery. . . . The whole subject is only one more illustration of the truth that there is a borderland between science and metaphysics, the boundaries of which require much more exact study and ascertainment than they have hitherto received. It is the province of modern logic to embrace this region within its survey, and to set up warning posts for men of science and for metaphysicians alike."

In his paper Mr. Russell began by saying that while the criticisms made on Leibnitz were "fully justified, no such criticisms are applicable to the present theory of the Calculus". Certain citations from recent text-books which I made, described, he declared, "very accurately the state of mind of an intelligent pupil who is being taught the calculus by an ignorant teacher". He went on to regret that I had apparently not come across any of the recognised modern

authorities on the subject, such as the *Encyclopädie der Mathematischen Wissenschaften*, or Dini's *Theorie der Functionen einer veränderlichen reellen Grösse*. If I had I would have learned "that the whole subject proceeds without ever introducing the infinitesimal, that the fundamental conception is that of a *limit*, and that a limit is something quite different from what non-mathematicians suppose it to be".

I am glad to learn from Mr. Russell that the "infinitesimal" has already been more completely discarded from current text-books than some scrutiny had led me to imagine it had been. I am at one with him in thinking that, on logical grounds, the idea and its expression must be banned. And before going further I will apologise to Mr. Russell if any expression of mine has led him to think that I professed to speak with adequate knowledge of what is going on in the world of mathematics. I had endeavoured to make it clear that it is only with the logical foundation of mathematics, these problems of epistemology on which Mr. Russell has himself written so remarkably, that I am occupied. Such problems are deeply concerned with topics such as those of infinitesimals and limits, and modern logic cannot and does not affect to pass them by. Indeed Mr. Russell himself does not grow weary of insisting to mathematicians that their science cannot be put on its legs, or kept there, without the aid of such a system of symbolic logic as he sets forth in the first volume of his *Principles*. The method which owed something to Boole and more to Schröder, was "transformed by the new methods of Professor Peano," and "has now become not only absolutely essential to every philosophical logician, but also necessary for the comprehension of mathematics generally, and even for the successful practice of certain branches of mathematics". Into the region of purely mathematical controversies there are not a great many who are capable of following Mr. Russell, and I am certainly outside of the number. He has the reputation in Great Britain and on the Continent of being one of the most ingenious and acute of the modern exponents of mathematical theory. But when, some time ago, I began to read with humility of spirit the first and less technical volume of his treatise on the principles of mathematics, I found, among much that was admirable, some things that seemed to me more dubious. Mr. Russell is a philosopher as well as a mathematician, and it is as a philosopher that he addresses the public in much of this volume. He begins by saying that in his work he has two main objects. The first is "the proof that all pure mathematics deals exclusively with concepts definable in

terms of a very small number of fundamental logical concepts, and that all its propositions are deducible from a very small number of fundamental logical principles". The second is "the explanation of the fundamental concepts which mathematics accepts as indefinable. This is a purely philosophical task." He goes on: "On fundamental questions of philosophy my position, in all its chief features, is derived from Mr. G. E. Moore. I have accepted from him the non-existential nature of propositions (except such as happen to assert existence) and their independence of any knowing mind; also the pluralism which regards the world, both that of existents, and that of entities, as composed of an infinite number of mutually independent entities with relations which are ultimate, and not reducible to adjectives of their terms or of the whole which these compose. Before learning these views from him, I found myself completely unable to construct any philosophy of arithmetic, whereas their acceptance brought about an immediate liberation from a large number of difficulties which I believe to be otherwise insuperable. The doctrines just mentioned are, in my opinion, quite indispensable to any even tolerably satisfactory philosophy of mathematics, as I hope the following pages will show."

Later on I shall have something to say about the meaning of the new departure in mathematical method to which Mr. Russell alludes. It is mainly concerned with the substitution, as the basis of mathematical analysis, of the notion of pure arithmetic, and especially of a continuum in which quantity is arithmetised, for the group of notions connected with the measurement of extensive magnitude. Now I doubt (and I think that the question is strictly one of logic) whether these latter notions were ever fully or clearly stated in the current mathematical text-books. If not, it may well be that the foundations of the higher mathematical analysis could have been made secure without abandoning them. But assuming that the new way of looking at quantity introduced by writers such as Dedekind and Cantor is to be regarded as final, the question is whether it required such a foundation as Mr. Russell insists on assigning to it in symbolic logic. I doubt the necessity for erecting the new structure on any such foundation, and I doubt whether on balance it possesses any advantage. The new and powerful methods of Dedekind and Cantor, as explained by these authors, seem to me to be the outcome of a general view of quantity which, if wider than that current in mathematical text-books, has been over and over again insisted on, not only

by Idealists from the days of Kant onwards, but by recent writers on logic as free from the terrible taint of Hegelianism as is Sigwart. Moreover the symbolic logic of Mr. Russell seeks to exhibit all pure mathematics as an absolutely deductive process, dealing with concepts definable in terms of certain specified fundamental logical principles. For him pure mathematics is concerned with what, following Peano, he calls *implications*. Cases in which propositions, like those of Euclid, relate to actual space, for him belong to applied or mixed mathematics. Now it is no doubt possible to take the forms of inference and divest them of all that makes them resemble the processes of our actual knowledge of reality. By a treatment which, if highly abstract is at least systematic, we can construct a logical calculus which will work, at all events for many purposes, and there is no reason to doubt that much of mathematical reasoning may be exhibited in this form. Such a method may be on occasions of real value, both in logic and in mathematics. But it has some awkward limitations. Its advocates have, in the first place, to show us how, on their principles, conclusions which are got by mere deduction from premises can ever carry us beyond these premises. Again the tendency of modern investigation is to confirm the opinion that the fashion in which we know does not admit of the representation, otherwise than for strictly limited purposes, of judgments by symbols that do not represent the processes on which these judgments are founded. For the more the process of judgment has been scanned, the more the majority of inquirers have been impressed with the impossibility of divesting it, even in its most abstract form, of an essential reference to reality. In the ordinary perceptive judgment this reference is explicit and direct. In other judgments, such as the hypothetical, it may be implicit or indirect. But turn and twist the process of judgment as we will, its subject seems to be always, explicitly or implicitly, some aspect of reality. Its process is the analysis of this aspect and, as inseparably bound up with such analysis, a synthesis with the subject in the judgment of the predicate thus analytically obtained, a synthesis which results in enlarged knowledge of the subject thus determined in further relations. The process is one of assigning what is determined as an element to its place in a system. Our universe of discourse is the aggregate of these systems. The postulate of knowledge is that each of these systems can be included in some further and more complete system towards which the necessity of thought impels it. The ultimate postulate of knowledge would seem to be a

final system which has nothing beyond it. In the concluding pages of the Address which Mr. Russell reviewed in MIND I observed that it is only on the basis of such a postulate that knowledge, and the progressive interpretation of reality which it sustains, are possible and intelligible. Every judgment affirms a necessity based on the reality of a final and all-comprehensive system, about which there can be no questioning, because it is itself related to nothing beyond, and all questioning falls within it. Its own relation to knowledge is, in other words, one not of necessity but of ultimate and final reality. As a corollary from this, just as the processes of human knowledge, including the distinction of what is felt or perceived from the predicates which we progressively incorporate with it, fall within the completed and self-contained system of intelligence thus finally postulated, so the system itself becomes real, not apart from, but only in and through these finite processes, outside which it would seem that we can attach no meaning to it. It is a mistake to try to find a gulf between infinity and the finite in which it is immanent. They are as little separable as are other concepts which mutually involve each other, such, for example, as continuity and discretion.

Mr. Russell of course rejects the existential view of the judgment, and with it the Aristotelian view of logical forms. The process of knowledge is highly complex, too complex to be capable of exhaustive reduction to the simple forms which Aristotle bequeathed to posterity. But if we are aiming at an accurate account of what we are actually doing when we are enlarging the field of knowledge, I think that Aristotle's analysis is much nearer to the facts than is the picture held up to us by Mr. Russell. Lotze in his *Logic* remarks (at the end of his note on the Logical Calculus, where he has been describing Boole's work): "How often have modern enterprises like these proclaimed the dawn of a wholly new epoch in logic, and the fall of the contemptible system of antiquity! I am convinced that if the ancient logic were to be really forgotten for some generations and then rediscovered by some fortunate thinker, it would be welcomed as a late discovery, after long search, of the natural march of thought, in the light of which we should find intelligible both the singularities and the real though limited relevancy of the forms of logical calculus with which we had made shift so far." But Mr. Russell may say that the difficulty of reconciling the most modern mathematical conceptions, such as those of series and limit, with the doctrines of Aristotle and Kant has

forced him to seek the solution in a new logical calculus. It is just here that I doubt whether he has done justice to these great teachers. I am not calling in question the immense advance in the field of mathematical method which he describes in his book. But I am going to suggest that this method does not require the special metaphysical and logical structure which he has built round it. I do not think that pure mathematics, even in its most abstract phases, is a mere process of deduction from general principles. On the contrary I believe it to be based on experience. I will presently assign reasons for thinking that even the barest process of counting is arrived at by abstraction from our consciousness of a succession in our acts of judgment, and that the genesis of number and series is disclosed by analysis to be the hypostatisation of our stream of mental states. Through the medium of certain fundamental conceptions we isolate in judgments which have perceptive and even intuitional reality as their subject, certain relations, and we do this just as truly when we apply the methods of Dedekind and Cantor, or of non-Euclidean and projective geometry, as we do when we count apples in a basket, or sketch a building. Here I find myself in direct conflict with Mr. Russell, and I am unfortunately compelled to be no less so over the fashion in which he employs his categories. When in his article in MIND he says that "the notion of a limit is, in fact, a purely ordinal notion, involving no reference to quantity whatever," he is assuming that the conception of quantity is no wider than that of what is measurable, and comes later than that of an ordered series. Many of the text-books of the calculus in effect say this, and I have been throughout ready to reproach them for it and should like to have done so in the good company of Mr. Russell. What I have to say is that if he had realised what is taught in these days by such writers on logic as, to take even two who differ as much on other points as do Sigwart and Bosanquet, he would have found that they agreed in rejecting the narrow view of quantity which he suggests as driving him to anti-idealist views about the meaning of judgment, and finally into symbolic logic. My strong impression is that there is nothing in the mathematical methods which he expounds that requires any other foundation than that on which these and other well-known logicians are substantially agreed. No doubt symbolic logic, particularly when elaborated and adapted to mathematics as Prof. Peano and Mr. Russell have done, may be of real service to mathematicians. But if the adaptation necessitates a total departure from the character and

form of the judgment and of inference generally, as we find these in experience, then the new system can claim no higher recognition than that of being a useful makeshift, and the natural tendency to get rid of it as a mere scaffolding will, in that case, inevitably make itself manifest. But because Mr. Russell takes what I must call a somewhat contracted and conventional view of the teaching of Idealism he insists that he must regard his metaphysical and logical system as the only one open to him. A little further on in his book than the passages which I have already quoted he says: "Idealists have tended more and more to regard all mathematics as dealing with mere appearance". Now this is a highly misleading statement, if it is intended to assert anything peculiar to mathematics. Kant himself, whose teaching on the subject is far from being the last word of Idealism, does not say so. Prof. Caird's two volumes dispose, I think, of this assertion even about Kant. Then Mr. Russell says that "not only the Aristotelian syllogistic theory, but also the modern doctrines of Symbolic Logic were either theoretically inadequate to mathematical reasoning, or at any rate required such artificial forms of statement that they could not be practically applied. In this fact lay the strength of the Kantian view, which asserted that mathematical reasoning is not strictly formal, but always uses intuitions, *i.e.*, the *a priori* knowledge of space and time. Thanks to the progress of Symbolic Logic, especially as treated by Professor Peano, this part of the Kantian philosophy is now capable of a final and irrevocable refutation." After stating that "by the help of ten principles of deduction, and ten other premises of a general logical nature" the whole of mathematics can be deduced, he adds, "The fact that all mathematics is Symbolic Logic is one of the greatest discoveries of our age; and when this fact has been established, the remainder of the principles of mathematics consists in the analysis of Symbolic Logic itself".

I have quoted Mr. Russell's words because it is important to be aware of the magnitude of the controversy and of the real issue which his book opens up. If he is right, the contribution which Kant is supposed to have made to the theory of mathematical truth was a huge blunder. But is Mr. Russell accurate in his statement of what Kant taught? People are apt to draw the hasty inference in their study of the *Critique of Pure Reason*, that the *Æsthetic*, a preliminary portion, contains all Kant had to say about mathematical truths. Because he finds that these truths are synthetic judgments *a priori* Kant begins by provisionally affirming

that space and time are pure forms of intuition which condition perception. Those who read him hurriedly conclude that therefore the foundation of mathematical inference is construction confined to the mere forms of space and time for its materials. In a sense Kant says so. But I think that Cohen's book on the foundations of the Infinitesimal Calculus which Mr. Russell cites largely in chapter xli. of his own work, has misled him about Kant. Kant is one of the most difficult authors to quote satisfactorily, for his method is to state a position and then to qualify it later on as he goes along. One has to read him backwards as well as forwards; the *Critique of Pure Reason*, for instance, is not really intelligible until one has read the *Critique of Judgment* which followed it. And this is especially true of the *Æsthetic*, and of his account of the so-called pure forms of space and time. They have no real existence, or even significance for knowledge, separately from what they derive through the schematisation of the categories, for the first time expounded in the *Analytic*. "In der That," he says in the section which deals with the schematism of the categories, "liegen unseren reinen sinnlichen Begriffen nicht Bilder der Gegenstände, sondern Schemate zum Grunde. Dem Begriffe von einem Triangel überhaupt würde gar kein Bild desselben jemals adäquat sein. Denn es würde die Allgemeinheit des Begriffs nicht erreichen, welche macht, dass dieser für alle, recht oder schiefwinklige, etc., gilt, sondern immer nur auf einen Theil dieser Sphäre eingeschränkt sein. Das Schema des Triangels kann niemals anderswo als in Gedanken existiren und bedeutet eine Regel der Synthesis der Einbildungskraft, in Ansehung reiner Gestalten im Raume." A page farther on (p. 172, Kirchmann's edition, Berlin, 1872) he says: "Das reine Bild aller Grössen (*quantorum*) vor dem äusseren Sinne ist der Raum, aller Gegenstände der Sinne aber überhaupt die Zeit. Das reine Schema der Grösse aber (*quantitatis*), als eines Begriffs des Verstandes, ist die Zahl, welche eine Vorstellung ist, die die successive Addition von Einem zu Einem (Gleichartigen) zusammenbefasst. Also ist die Zahl nichts Anderes, als die Einheit der Synthesis des Mannigfaltigen einer gleichartigen Anschauung überhaupt, dadurch, dass ich die Zeit selbst in der Apprehension der Anschauung erzeuge." Mr. Russell seems to me to overlook the real meaning and use attached by Kant to the forms of intuition. If he had considered what Caird and other recent commentators on Kant have brought to light about the relation of the Schema to Time in particular, he would have found that in the last of the sentences above quoted from Kant there is enunciated a prin-

ciple to which he fails to do justice.[1] For instance, at page 158 of his book he discusses the relation of quantity to number. He seems to suggest that until certain very recent developments in mathematics took place the conception of quantity had no place excepting as a logical derivative from some intuition of magnitude. But now, he declares, one school, that of Weierstrass, Dedekind and Cantor, have pointed out that, if irrational numbers are to be significantly employed as the measure of quantitative fractions, they must be defined without reference to quantity, and that in this way a new subject "which has added quite immeasurably to theoretical correctness," has been created, which is fatal to the Kantian theory of *a priori* intuitions as the basis of mathematics. Moreover, he adds, new branches of mathematics which deal neither with number nor with quantity have been invented, and "it has appeared that measurement—if this means the correlation with numbers of entities which are not numbers or aggregates—is not a prerogative of quantities," for some quantities cannot be measured, and some things which are not quantities can be measured. "The separation between number and quantity is thus complete. Each is wholly independent of the other. Quantity, moreover, has lost the mathematical importance which it used to possess, owing to the fact that most theorems concerning it can be generalised so as to become theorems concerning order. It would therefore be natural to discuss order before quantity." I have quoted Mr. Russell thus fully, though not for the purpose of criticising his mathematical reasoning. Were I competent I would not presume to do so in the case of a writer so eminent. But I am forced to point out that what he is dealing with is a problem, not of mathematics primarily, but of epistemology. Before we can express ourselves confidently about number and quantity we must be quite clear what we mean by them. Moreover the relationship to each other and to experience of the categories of thought, which he discusses almost as though the soil were virgin, is a very old problem. I have stated why I doubt whether he appreciates the teaching even of Kant on this branch of epistemology. But after Kant's time the matter was yet more thoroughly investigated. Mr. Russell often quotes Hegel--Hegel may or may not be out of date; there is progress backwards as well as forwards. But I notice that Mr. Russell's citations are from the small *Encyclopedia Logic*, which contains a mere outline, and that he makes

[1] See a recent monograph in which this is well worked out: *Vergleich der Methoden Kants und Hegels auf Grund ihrer Behandlung der Kategorie, der Quantität*, by J. M. O'Sullivan, Berlin, 1908.

little reference to the larger '*Wissenschaft der Logik*, where the problems that arise out of the relation of logic to mathematical conceptions are fully discussed. Idealism in its varied forms, whether it is the idealism of Aristotle, of Kant, of Hegel or of so restrained a thinker as Mr. Bradley, asserts broadly that what we mean, when in every-day life we speak of reality, depends on distinctions which fall within knowledge and not without it. This principle separates the creed of Idealism from the metaphysical doctrine of Mr. Russell.

All teaching about concepts and judgments is and must be largely consequential, and cannot but be profoundly affected by any divergence in root principles. The idealists may be in danger of misinterpreting Mr. Russell. I am sure he is in danger of misinterpreting them. For those who think that the basis of reality is mind, even when they interpret mind as embracing the particulars of feeling not less than the universals of abstract thought, and deny that the one factor in individual reality exists apart from the other, or that either has a meaning excepting as abstracted from the entirety of self-consciousness, there is a duty which faces the inquirer at the outset. It is to criticise his categories. He must see what are the broad conceptions which are involved in the very texture, alike of the process of knowledge and of the objects which attain reality in that process. This is the larger treatment of logic which Kant commenced and which his Idealist successors sought to carry out. It is probable that much work has yet to be done in order to complete it. But unless the teaching of Idealism is to be wholly set aside, and I am not sure that even Mr. Russell wishes to set it wholly aside, we cannot assume lightly that a category such as quantity ought to be discussed after order, or eliminated from mathematical discussion altogether. To make such a pronouncement is only legitimate if we have first subjected these fundamental notions to close scrutiny in a more searching fashion than symbolic logic alone can do, and have made up our minds finally as to what we mean by them, and what is their relation to one another. Unless we do this confusion is sure to result, and we shall find ourselves speaking to those we are seeking to instruct in language to which they attach a different meaning. There exist systematic accounts in the logic books of these fundamental notions, in which their relationship is exhibited, and in which quality is shown in its logical relation to quantity, and quantity in its turn is compared with quantum, with number, with degree, with measure, and so on. These categories, it is said, cannot be defined apart from each other, and a precise

function in the process of knowledge must be attributed to each. The attempt to do this may have succeeded or it may not, but the reasons for making it are very cogent. Mr. Russell seems to think that the necessity for this tedious and difficult process has been superseded by the investigations of modern mathematicians. I do not think so. What he writes appears to me to divide itself into two parts—epistemology and mathematics. While I seem to see that it would have been of advantage if Mr. Russell had defined his categories before entering on the former, I cannot, so far as I can presume to judge, find that his purely mathematical reasoning really depends to any material extent on his metaphysics. This is a relief in reading a book so full of striking things and so obviously able as is his *Principles of Mathematics*. And I am the more encouraged in the view I hold because his mathematical doctrine is that of a school within which the agreement seems to preponderate over divergence of view. The work of this school does not appear to rest on any particular philosophical principles, and its reasoning is, as far as I can judge, wholly consistent with Kantian views of the foundations of mathematics, provided Kant's critiques are interpreted as most of the authorities of to-day hold that they must be.

But the mathematics of this school, if they are concerned with epistemological questions less than Mr. Russell would have us think, nevertheless do mark a real advance along the highway of scientific generalisation. Let us try to see something of what this advance means. I do not think that the new method imports any revolution in our fundamental notions. Many of its results might have come, to the best of such judgment as I have been able to form, from the application of the kind of criticism which Mr. Russell admits, as I pointed out in the early part of this paper, to have been properly directed against the school of Leibnitz and the older writers on the calculus. As a matter of fact, this new method has originated, not with German metaphysicians, but mainly with German mathematicians. Its scope is limited. It was originally devised to get rid of the necessity of expressing mathematical conceptions by reference to the standard of a spatial continuum, which was considered to be deficient in important respects as a basis, and to substitute for the spatial standard that of an arithmetic continuum. Whether the substitution of this new basis represents the last word, or whether it is only a useful makeshift, remains to be seen. Anyhow, for reasons which I will presently state, I retain the impression which I formed when some time since I read

a book by one of the pioneers of the new doctrine, Dedekind. The revolution is purely mathematical and not epistemological. It is concerned with no particular theory of the nature of inference, or of the relation of the judgment to reality. For the mathematician, however, it introduces fresh and great principles. Moreover the new region has for the student of logic the attractive feature that it is by no means so impenetrable to the non-mathematical reader as is most of the territory governed by the ordinary mathematician. Dedekind, who has a great gift of lucid exposition, sets himself to show this. And another writer, Mr. E. W. Hobson, who has written an admirably comprehensive and careful book on this new field of research—*The Theory of Functions of a Real Variable*—is almost equally intelligible to the general reader in those portions of his work which are concerned with the statement of principles.

Dedekind published two famous Memoirs, the first in 1872, *Stetigkeit und Irrationale Zahlen;* the second in 1887, *Was sind und was sollen die Zahlen.* They have been translated by Prof. Beman under the title *Essays on the Theory of Numbers* (1901), and are now classical. I shall try to disentangle the significance of the doctrines relating to quantity and number which are set forth in these Memoirs. To enable me to do this intelligibly I wish first to say something further about the conceptions of quantity and number.

It would have helped the student of recent developments in mathematical ideas if a settlement had been arrived at about the meaning of the words used in describing them. It is confusing to find, for example, quantity and magnitude used as convertible terms, and at times spoken of as though they were merely names for modes of existence in space. It is only natural that those who speak so should go on to assume that order does not presuppose quantity, and has nothing to do with it. In truth and in fact quantity is a highly general concept. It covers indefinitely every mode of continuous existence in which we have got beyond particular quality as its essential. When we regard the object of thought quantitatively we cease to attend to quality as of the essence of its being, and we concentrate on this, that the object has a characteristic which may be altered without affecting the existence or the nature of that of which it is the characteristic. It may be very important to know the number of trees in a wood, but the wood remains a wood although a thousand more trees grow up. Nevertheless conceptions or categories of this kind are forms of thought, and these "Denk-bestimmungen," as they have been called, are

not inert. They are root forms of intellectual activity, and because it is of the nature of the intellect to be active, it is constantly, in the process of judgment and inference, passing from link to link of the series which they form. Thus even within mere quantity, where the thing remains what it is while it becomes greater or less, we find constant development of the aspects of both continuity and discretion. It is forced on us that the intellectual process which takes shape in the judgment of quantity displays, as essential to it, both characteristics. They are not two kinds of quantity but the double implication of a single predicate. The antinomies of space and time and matter simply mean that we treat quantity at one moment in its discrete aspect, and at another as continuous, and fail to distinguish the two aspects. When quantity is regarded in its exclusive or discrete aspect, and this by abstraction is hypostatised, we pass to limited quantity or quantum, and when such a limited or definite quantity is made, in the process of thinking, definite, and so distinguished from other and similar manifestations of the definite relation of quantity, the outcome is the notion of a series each member of which is defined as such by reference to other members, and is regarded as one among many. Looked at as breaking up internally and exhibiting itself as containing a plurality of elements, the series gives us the notion of number. If it be remembered that in logic the category of quantity has thus a very wide and general significance it is plain that such operations as counting, with the numbers and order in series which result, are derivatives of the operation of thought which establishes the quantitative predicate. This is not, as I understand him, the doctrine of Mr. Russell, but it is a doctrine which appears to me not only to be consistent with, but to assist the theory on which the most modern mathematics bases itself. Mr. Russell seems to assume that the concept of quantity has been hitherto treated as a mere abstraction derived from the bare intuitions of space and time. But this is not really so. For logic, as I understand it, quantitative relations and series are constituted by operations of judgment which, as Kant hints in the passages I have quoted above, themselves make the intuitions of space and time possible.[1] Their foundation is logical, although it is in experience that they attain to concrete reality. Of course it is true that in the psychological history of our intelligence these abstract conceptions are evolved as experience progresses, and that in general we use

[1] See Herr O'Sullivan's monograph, pp. 42 *et seq.*

them in concrete applications, and after we have begun to realise the meaning of space and time.

But it is the great merit of the new mathematics to have independently illustrated the proposition that, to get at the real foundation of mathematical reasoning, we must by abstraction disentangle the conditions which are presupposed in even the most general and empty spatial and temporal consciousness. What are really derivatives are a hindrance and not a help in any search after first principles, and it is right, if it is practicable, to adopt methods which, by legitimate operations of logical abstraction under fundamental categories, can be made to depend on relations of pure quantity and number, to the exclusion of elements which belong to a subsequent stage in knowledge. Such relations and their concepts do not exhaust the nature of reality. It is as abstractions from an experience which has no existence apart from them, any more than they have apart from such experience, that we become aware of them. When Mr. Russell attributes to them and to the propositions which embody them "independence of any knowing mind," what he says has no more meaning for me than the sayings of Locke and his school about substance as existing in itself. And his system of symbolic logic seems to me to presuppose as the condition of its possibility an entire system of relations and concepts for which he makes no provision. Before we can go with him in accepting as fundamental and indefinable such notions as that of the relation of an individual to a class and of "such that" we must have travelled a long way. The presuppositions of symbolic logic and mathematical method alike seem to require more searching consideration than he bestows on them.

Moreover, unless the process of knowledge is one in which we begin with reality and are engaged throughout in extending the relations of the subject of the judgment in knowledge, it is to me, as I have already said, impossible to comprehend how knowledge can progress. Unless inference is neither merely deductive, nor merely inductive, unless it is as much synthetic as it is analytic, in other words unless each of these adjectives is *in itself* wholly inadequate to describe the process by which knowledge progresses, we cannot really get beyond our starting point. The most abstract problem of non-Euclidean Geometry seems to set out from a point of departure which is postulated as real, although, by the concentration of exclusive attention, the triangle, for instance, has been by abstraction stripped of a multitude of features to which we attend when we meet in every-day life with any-

thing coming under that designation.[1] But if this be true how can the method of mathematics be, as Mr. Russell would have us think, purely deductive?

The implied reference to reality which is characteristic of the mathematical as much as of every other form or judgment, is well illustrated by the process of counting. In simple counting, as in every process of judgment, we have an identity exhibited in differences and affirmed of reality, the elements of which present themselves in the shape of distinct units within a continuous process. The relation to this process is indicated by number. It follows that number, although we get to it by abstraction from the experience of serial mental acts, is not a mere derivative of the concept of time. What is essential is that the judgment of number should establish a logical *order* among the units, giving each a place in a series conditioned by separate judgments about other units. We may conceivably be aware of several units as existing simultaneously and yet as arranged in order of series. Again all the units are numbered in virtue of a continuous quality or identity which pervades them, and "every unit, though it may only be suggested by a momentary purpose"—"is a distinguishable part within a whole or aggregate consisting of such parts. The books on a shelf are not merely discrete, and the inches in a yard, or the units of weight in a gravitating body are not merely continuous; in every case the unit is a distinct or discrete part, and the sum is a self-identical or discrete whole. It is nonsense to speak of counting without saying what is to be counted" (what we count may be, and in all probability primarily are, the acts of judgment as acts of distinction and relation within a certain continuous quality) "and in specifying what is to be counted we specify at once the nature of the continuity and the rule of the discretion".[2]

Sigwart[3] takes much the same view of number as Mr. Bosanquet expresses in the passage just cited. We should think of number, he holds, as a spontaneous creation of thought in becoming conscious of its own activities, and as in this way, when it has once arisen, independent in its further developments of all that is sense-given. In it we merely bring into definite consciousness what we always do when, in thinking of and discriminating unities, we pass from one to another. He declares that wherever it is possible to combine even differences in one consciousness, so that

[1] On this point see Herr O'Sullivan's monograph at p. 68.
[2] Bosanquet, *Logic*, vol. i., p. 159.
[3] *Logic*, Eng. tr., vol. ii., p. 32 *et seq.*

memory can survey them and connect the beginning with the end, and discrimination include the whole within one boundary, there we have the possibility of the one; wherever it is possible to think of differences within a whole, or to combine a number of different objects while still maintaining the consciousness of their difference, there we have the possibility of the many. This is, for Sigwart, the foundation of number. Each number is not mere plurality, but a plurality which is bound together and limited, and so far thought as a unity, in one act of thought which combines together the repeated acts by which we have distinguished the units. He goes on to show that these definitions afford room for irrational and imaginary numbers. In these we extend the concept of number to all combinations arising out of our methods of calculation. The extension is justified by the fact that these combinations resemble actual numbers in this respect that they are all comparable as more or less (it would have been more accurate had Sigwart said in point of *order in series*), and can thus be brought into a series, and that therefore the different methods of calculation, similarly extended in meaning, can be applied to them. He points out, in this respect in close agreement as will be seen later on with Dedekind, that the possibility of inserting any number of fractions and irrational numbers between any two consecutive rational numbers, thus diminishing to any extent the difference between successive numbers, *seems* to reduce number—which originally arose out of discrete steps—to a continuum, and to transform it into a magnitude in the same sense in which space and time are magnitudes. But this inference he rejects. For he says that number is always discrete, since however far we may push our interpolation we can never succeed in reaching more than a finite number of intervening members, and the law according to which interpolation takes place, though it gives no definite limit, must always, from the nature of the numerical expression, call on us to break off somewhere. The continuous progress which intuition gives us in space and time can never, Sigwart affirms, be really expressed in the logical forms of number, which depend on unity and difference in determinate acts. In the differential calculus, he says, we attempt to break down the limits which arise from the nature of number, but we succeed in forcing upon it the expression of continuous change only by means of artifices in which we avoid assigning any numerical value to the differentials themselves, and confine ourselves to expressing their relations to each other in numbers and combinations of number.

I have quoted two contemporary writers in support of a view which I agree with Mr. Russell in holding strongly. Logical and epistemological principles have a close bearing on the problems which relate to the foundations of mathematics. What I dissent from is his method of approaching the consideration of these principles, and certain conclusions which have proved to be the result, such as his determination to divorce mathematics from any origin in experience and to treat it as an illustration of purely deductive method. With his description of the recent developments in mathematical science I repeat that I neither desire nor am competent to quarrel. It is his ideas about the ultimate foundations of reality that concern me, because I am not sure that he has appreciated the attitude of those logicians whom he criticises, even as regards mathematics. It may be quite true that "in Hegel's day the procedure of mathematicians was full of errors," but it is not true that these errors "Hegel did not condemn as errors, but welcomed as 'Antinomies'". If he will read the second part of the *Wissenschaft der Logik* he will find that Hegel's reproach was over ideas which Mr. Russell himself agrees with Hegel in regarding as sheer mistakes, and which Hegel regarded as the direct result of a failure to grasp the significance of the notion of quantity and what was implied in it. Nor is it fair to say such things as that philosophers argue "as if differentiability were a consequence of continuity" merely. The implied suggestion is misleading. Writers like Sigwart and Bosanquet would accept, as far as I can see, the most recent improvements in method made by Mr. Russell and other mathematicians without demur. But they would point out that these improvements are improvements in method merely, and do not touch root conceptions. On this point I shall have to say something later on. I wish first, in the light of the remarks I have just made, to return to the topic of Dedekind's new method.

From the standpoint of logicians this method is full of interest. In his Memoir on *Continuity and Irrational Numbers* he tells us how he was guided towards the new region in in which he has done so much as a pioneer explorer: "As professor in the Polytechnic School in Zurich I found myself (in 1858) for the first time obliged to lecture upon the elements of the Differential Calculus, and felt more keenly than ever before the lack of a really scientific foundation for arithmetic. In discussing the notion of the approach of a variable magnitude to a fixed limiting value, and especially in proving the theorem that every magnitude which

grows continually, but not beyond all limits, must certainly approach a limiting value, I had recourse to geometric evidences. Even now such resort to geometric intuition in a first presentation of the Differential Calculus I regard as exceedingly useful from the didactic standpoint, and indeed indispensable, if one does not wish to lose too much time. But that this form of introduction to the Differential Calculus can make no claim to being scientific, no one will deny. For myself this feeling of dissatisfaction was so overpowering that I made the fixed resolve to keep meditating on the question till I should find a purely arithmetic and absolutely exact foundation for the principles of infinitesimal analysis. The statement is frequently made that the Differential Calculus deals with continuous magnitude, but no explanation of this continuity is given. Even the most careful expositions of the Differential Calculus do not base their proofs upon continuity, but, more or less consciously, either appeal to geometric notions or depend on theorems which are not established arithmetically. Among these falls the theorem above mentioned, and further investigation satisfied me that this theorem, or one equivalent to it, might to some extent be looked on as a sufficient basis for infinitesimal analysis. It only remained to discover its true origin in the elementary conceptions of arithmetic, and at the same time to secure a real definition of the essence of continuity."

He proceeds to find that the whole of arithmetic arises out of the simple act of counting. This he defines to be "the creation in succession of the infinite series of positive integers, in which each individual is defined by the one immediately preceding". The fundamental act is the passing from an already formed individual to a new one to be formed. The combination of repetitions of this act is addition, and multiplication arises in the same way. So do substraction and division, but these, unlike the former, force us to the conception of negative and fractional numbers. If on a straight line we select a definite point of origin or zero point, and a definite unit of length for the measurement of segments, we can assign for every number, positive, negative or fractional, which has a definite arithmetical ratio to the others, and may therefore be called a rational number, a corresponding length on the straight line. But now we come to the difficulty. Among the infinite number of points which lie in the straight line there are those which correspond to no rational number, and there are lengths incommensurable with a given unit of length. For instance, as the Greeks long ago pointed out, the diagonal of the square whose side

is the unit of length is incommensurable with that side. If we lay off a length corresponding to that diagonal, we obtain an end point which corresponds to a numerical symbol but to no rational number. Thus it becomes apparent that our straight line is infinitely richer in point-individuals than our domain of rational numbers in number-individuals, and that our system of *rational* numbers, however complete, is inadequate to the complete and continuous measurement of lengths on our straight line. To our system of rational numbers we must therefore find out how to add new numbers such that the domain of numbers may possess the same completeness or continuity as the straight line. To do this we must find out what the continuity or absence of gaps in the geometrically straight line means. Now every point on the straight line separates it into two portions such that every point of one portion lies to the left of every point of the other. The essence of continuity Dedekind finds in a further principle which he states thus :—

"If all points of the straight line fall into two classes, such that every point of the first class lies to the left of every point of the second class, then there exists one and only one point which produces this division of all points into two classes, this severing of the straight line into two portions". Of this definition he declares that it must be regarded as axiomatic and cannot be proved to be true. If space has a real existence it may have gaps. But if, says Dedekind, this be so, the filling up in thought of the gaps would be the notional creation of new point individuals, and so would be in accordance with the axiom. It is now plain what has to be done. We must find a method of filling up the gaps in the discontinuous series of rational numbers so as to make it continuous. Ideal measurement along the straight line with the aid of a unit of length has broken down. But, if for this space-continuum which has turned out to be no true means of representing continuity, we can substitute an arithmetic or number continuum, the problem will be solved, for we shall have then got something to operate on which possesses the essential property of continuity as well as that of the discretion which is necessary for counting; in other words, which has concurrently inherent in it the two characteristics of pure quantity. Thus we shall, such is my interpretation of what Dedekind means, have brought mathematics back to the elemental and general category of quantity as its true foundation. The new instrument may be difficult to handle, and it is not necessary or convenient, as indeed Dedekind himself points out in a passage already quoted, to be constantly em-

ploying it even in infinitesimal analysis. But it is the only method, *so far discovered*, of placing infinitesimal analysis on a satisfactory basis. Some day a method may be discovered of dealing with space and the straight line on the basis of methods of ideal measurement that are on the one hand exact and continuous, and on the other comprehensive. So far such methods appear not to have been discovered.

From this summary of Dedekind's preliminary statement I pass briefly to the method of purely quantitative and non-spatial treatment. Of this there are several varieties. That of Dedekind is substantially as follows: He takes the system of rational numbers, discontinuous, as already has been shown. Now we can always by means of a rational number effect a separation of an entire ordered system or series of rational numbers into two classes such that, if we call the first class A_1, every number a_1 of this class is lower in order than every number a_2 of the second class A_2. This separation and the result described may be called a section (*Schnitt*), $(A_1\ A_2)$. Thus every rational number produces a section, and a section which obviously possesses the property that either among the numbers of the first class there exists an (ordinally) greatest, or among the numbers of the second class an (ordinally) least number. We may therefore say that corresponding to any given rational number, there exists a section which divides the aggregate series of rational numbers into two classes, such that all the numbers of the first class are less than all those of the second class; and such that either in the first class there is no greatest number, or else in the second class no least number. But suppose that we do, what we can effect with a series of numbers, though we could not make an analogous measurement along a straight line, divide the series so as to bring in irrational numbers. For instance 3 is not a square number. The entire series of rational numbers may yet be divided with reference to it into (1) a lower class which contains all the negative numbers and also those positive numbers of which the square is less than 3, and (2) a higher class which contains all the positive numbers the square of which is greater than 3. The first class obviously contains no greatest number. The second class contains no least number. The section, although a section primarily of rational numbers, is none the less related to the irrational number $\sqrt{-3}$, in the same way as A_1 the section first above described, was related to a rational number. Now we have got to something novel. For while it is true that between any two numbers, whether rational only or real, we can to an indefinite extent introduce intermediate numbers, so as to make

the series indefinitely everywhere dense, or, as it is called, connex, we cannot everywhere divide the series into sections by means of a merely rational number. But we can do this everywhere by means of an irrational number which belongs, as much as does the number that is rational, to the wider class of real numbers. The aggregate domain of rational numbers, taken exclusively of those that are irrational, is thus imperfect. A true continuum cannot consist merely of rational numbers, for these, while they exhibit everywhere discretion, do not everywhere exhibit continuity. The true continuum, in order to be everywhere perfect as well as dense or connex, and so to combine the characteristics of being completely continuous as well as completely discrete, must therefore consist of an aggregate of numbers that embraces the wider class of all that are real as well as the narrower class of all that are rational. Such an aggregate is called the continuum of real numbers, or the arithmetic continuum. What we have done is to introduce into the conception of the entire series of number, so as to fill up every conceivable gap in it, an unlimited membership of irrational or incommensurable numbers, which not the less can be placed in a series where the order of the arrangement depends on the rank of the members, and this rank in its turn depends on qualities which have no necessary reference to relations of magnitude or at least of measurable quantity. If the series be really continuous then these irrational numbers are just as much to be regarded as real as are the rational numbers, the only difference lying in the practicability of measurement. But even though the real number which divides the series is incommensurable it is just as capable of being defined as is a rational number in the series, for, in the way just indicated, its position in point of order can be shown with reference to the rational numbers in the series themselves. It may be treated as corresponding to a lower class or segment, as defined above, of a series of rational numbers, a segment which is none the less capable of defining, by reason of its having, as must be the case when the dividing number is irrational, no greatest number. For example, while the number 3 is readily defined to be, in the language of the new analysis, the *aggregate* (from the point of view of order merely and not measurement) of all rational numbers, which are less than the rational number 3, the irrational number $\sqrt{3}$ is defined as the aggregate of all rational numbers which are either negative, or, if positive, have their squares less than 3. Now as we can always deal with sections containing rational numbers exclusively, and can perform with them

the ordinary operations of mathematics, we have made a great advance. For the possibility of such operations is extended through the medium of these sections to the irrational numbers which they define. These, it is suggested, *plus* the rational numbers, together make up the whole of what is numerically possible. The two classes are said to exhaust the field of reality, and the infinity of numbers thus enlarged in their scope may be called *real* numbers. They present, it is alleged by the new school, in one of their aspects, an aspect with which we can operate consistently, a true continuum, a field where the quality of continuity is just as much and as necessarily present as is that of being discrete. Whether this method and the doctrine based on it carries us as far as some enthusiasts imagine, is at least a very open question. Do we ever get true continuity within the domain of number, even when extended so as to embrace the so-called real numbers? What do these real numbers and the irrationals which they include really import for epistemology and logic, as distinguished from the function of being convenient mathematical makeshifts? These are questions which do not appear to have been as yet adequately considered. But at all events for practical use number no longer shows gaps, to the extent that it did when we considered it as based on the intuition of the straight line, and we get, for the first time, as our object a marked advance towards a true continuum. It is not spatial but arithmetic. It carries us further back towards the notion of pure quantity, and is a new and potent method of abstraction, that is, of diverting attention from what is irrelevant in the reality which is the starting point. Its conception, whether we look at the intervals between the members of its series, or the continuity which arises from the infinite number of members of the series, is ordinal. Order, in other words, and not representation of the measurement of definite quanta, governs its constitution. It relieves us from the vagueness and limited character of the so-called intuitional continuum of extensive magnitude of the older mathematicians. For the methods of these last broke down when a specific and definite answer was sought to the question how a formula was to be found for *every* intermediate position through which a body moving in space passes. It was assumed that space was indefinitely divisible into finite parts, and analysis proceeded on this basis, and necessarily broke down. The reason was that the procedure tacitly assumed the exclusive existence of a merely discrete character of space, and negatived that continuous aspect which equally pertains and is equally vital to the reality of all that falls

under the category of quantity. The new procedure can and does take a fuller account of the continuous aspect of reality.

I have endeavoured to do what a layman can with a mind which, if mathematically ill-furnished, is at all events attracted by the subject, towards giving some account of Dedekind's main conception. And that of Cantor, as I understand it, seems to me to be no more than an analogous and equally intelligible means towards the same end. Instead of defining as Dedekind does, the elements of the aggregate of real numbers by means of a section of rational numbers, he accomplishes the same result by applying the notion of a convergent sequence of rational numbers. Space does not permit me to attempt to enter into the details of this method. The reader who is curious to follow it out will find a clear account of it at page 26 of Mr. Hobson's book on the *Theory of Functions of a Real Variable*, a book admirable alike in its lucidity and in its caution. I can here only observe that, just as to each of Dedekind's sections, so to each of Cantor's convergent sequences, there corresponds, not necessarily a rational, but certainly a real number. It is easy to see that since what seemed to Leibnitz and his followers to confine them to measurable magnitudes has been thus eliminated, and a mode of enumeration has been introduced which is at all events more nearly adequate to what is required by the conception of continuity, an arithmetical theory of limits and of variables becomes possible which escapes the old objections. Moreover another conclusion follows. In arithmetical analysis there is no room for an actual infinitesimal. For if, after the fashion of Leibnitz, we use the expression "infinitesimal" at all, it can only be to indicate the process whereby a variable, to which the numbers of a sequence converging to zero are successively ascribed as values, approaches the limit zero. An infinitesimal thus means a variable in a state of flux, or capable, if we like to treat it so, of occupying *any* ordinal position in a series, and never a number in the conventional sense. We cannot properly describe the sides of the polygons which are inscribed in a circle as under any circumstances infinitesimals. The length of the circumference of the circle is rather the arithmetical limit of the sequence of numbers which represents the perimeters of the inscribed polygons. When this sequence is convergent, and its limit is independent of the particular choice of the sides of the polygons, the limit so obtained determines the length of the curve. In case no such limit exists the curve is regarded as not having a length.

If the stern realities of experience left it open to us to

choose as we liked when we should use the concepts of continuity, and when those of discretion, the extension of knowledge would be a simpler business than it is. But for deeply seated reasons experience has and must have in it certain features which always baffle our attempts to regard it in the light of a perfectly coherent system. The search after a complete whole which shall embrace and account for all that we see and feel and hear is an unending one. Even why we pass from the category of discretion to that of continuity is not always plain. Erdmann, in a book which ought to be better known to students of this class of subject than it is, his *Logik und Metaphysik* (4th ed., p. 44), observes: "Das sehr merkwürdige Problem, wie ganz bestimmte Zusammengehörige Quanta (z. b. Seite und Diagonale des Quadrats) incommensurabel sein können, ware gelöst, wenn gezeigt würde warum, wenn, das eine als discret gedacht wird, das andere nur als Continuum genommen werden muss". Difficulties of the type to which Erdmann refers become, however, of much less importance in the presence of analytical methods which can take account of the discrete and continuous simultaneously. There is a passage in Mr. Hobson's book which is worth quoting as the conclusion of what I have to say upon this subject. After pointing out that the actual use of fractional numbers arose historically from the necessity of the process of measurement of extensive magnitude, he goes on (p. 13) as follows: "The notion of the essential nature of a fraction, dependent as it is upon the notions of a *unit*, and of the divisibility of such a unit into *equal parts*, is incompatible with the modern view that mathematical analysis should be developed upon the basis of a pure arithmetic, quite independently of all notions connected with the measurement of extensive magnitude. The modern tendency known as Arithmetisation manifests itself in the construction of theories of number and of the operations involving numbers, which depend entirely upon the conceptions connected with the process of counting, measure being regarded as a process foreign to Pure Arithmetic. The process of counting is an exact one; whereas measurement can in practice only be carried out with a greater or less degree of approximation, and can only ideally be made an exact process. Pure arithmetic is made the basis of analysis, not only in accordance with the general principle that the fundamental conceptions of a branch of Science should be irreducible to simpler conceptions, but also because the theory of ideally exact measurement has peculiar difficulties of its own. Our essentially inexact intuitions of spatial, temporal, or other

magnitudes, necessitate a process of idealisation in which the objects of perception are replaced by ideal objects subject to an exact scheme of definitions and postulates, in order that an exact science of measurement may be possible. The view is at present held by the majority of mathematicians that the nature of an abstract continuum, and that of a limit, are capable of formulation only in the language of a pure arithmetic, and that this science must therefore be developed upon an independent basis before it can be applied to the elucidation of the conceptions requisite for an abstract theory of continuous magnitude. The theory of measurement is, in accordance with this view, regarded as an application, and not as part of the basis, of Mathematical Analysis." Later on (at p. 51) he says: "The term 'arithmetic continuum' is used to denote the aggregate of real numbers, because it is held that the system of numbers of this aggregate is adequate for the complete analytical representation of what is known as continuous magnitude. The theory of the arithmetic continuum has been criticised on the ground that it is an attempt to find the continuous within the domain of number, whereas number is essentially discrete. Such an objection pre-supposes the existence of some independent conception of the continuum, with which that of the aggregate of real numbers can be compared. At the time when the theory of the arithmetic continuum was developed the only conception of the continuum which was extant was that of the continuum as given by intuition: but this, as we shall show, is too vague a conception to be fitted for an object of exact mathematical thought, until its character as a pure intuitional datum has been modified by exact definitions and axioms. The discussions connected with arithmetisation have led to the construction of abstract theories of measurable quantity; and these all involve the use of some system of arithmetic, as providing the necessary language for the description of the relations of magnitudes and quantities. It would thus appear to be highly probable that, whatever abstract conception of the intuitional conception of quantity and magnitude may be developed, a parallel conception of the arithmetic continuum, though not necessarily identical with the one which we have discussed, will be required." The concluding words of this last passage suggest that there is in Mr. Hobson's mind the same doubt as in Dedekind's as to whether the spatial continuum cannot be more adequately treated by analytical methods than has hitherto been the case. In the second volume of his *Wissenschaft der Logik* Hegel examines at some length the possibilities of basing the Calculus on the

notion of pure quantity as applied to the qualitative relations of quantitative *principia* (not elements). I have not sufficient mathematical knowledge to be able even to guess how far a method rigorously based on such a view of quantity might carry us in the investigation of spatial relations. Hegel himself, and his knowledge was not to be despised, seems to have thought that it could solve problems relating to the relation of spatial continuity to number which were in his day, and so far as I know still remain, unsolved. Whether he was himself on the track of a conception of quantity which would have served the purpose or not, it seems that both Mr. Hobson and Dedekind are disposed to be of opinion that the theory of the arithmetisation of quantity is not only a principle valuable in itself, but one which may guide us to a new and more complete conception, yet to be adequately worked out by mathematicians, of continuous space. Hegel's criticism of the mathematicians of his time was that they had piled up obstacles to their own path, and his detailed application of this criticism seems to me worthy of being better known than it appears to be.[1] For the real question which lies at the root of everything is what has been the true origin of the difficulties which mathematicians have been struggling to overcome. What is the real character of mathematical method? Is it directly dependent on conceptions which belong to logic?

Now Logic does not mean only the analysis of the process by which the individual develops in time his knowledge of his object-world. It means this no doubt. But the analysis itself suggests that the whole process, including the very meaning and existence of the mind and its object-world, implies something else. The process appears to be possible only in virtue of related universals of knowledge which are not the less the foundations of reality because they are themselves only real in a consciousness of the self and its object-world which is always concrete and individual. They form but one aspect of reality, yet an aspect which must be grasped and interpreted if the foundations of experience are to be reached. This discovery was made by Aristotle long ago, and again by Kant. A more thorough-going attempt to work it out was made later still by Hegel. The Hegelian system may have attempted too much. It has been caricatured, and the caricatures have frightened one set of people and stirred another to merriment. But the fact remains that on the study of

[1] He used to complain that mathematicians called everything irrational in which reason began to intrude, *i.e.*, in which *systematic* heterogeneity made its appearance.

many departments of science, history, jurisprudence, sociology, for example, it has exercised an influence as transforming as it appears to have been enduring. Greatest of all, however, has been its influence on the study of logic in the whole of its developments, and it is not too much to say that no man is in this department abreast of the knowledge of his time who has not mastered the critical examination conducted by Hegel into the condition of logic as he found it. The student may accept or reject the result, but he will get into difficulties if he does not take the trouble required for its understanding. Now one of the pieces of work on which Hegel bestowed close attention was, as I have already stated, the careful sifting out of the category or, as he called it, "Denk-bestimmung" of quantity. The predicate of mere existence tells very little, but it is the basis on which something is recognised as possessing quality, which is a determinate mode of existence. And when quantity is predicated we have got further still. The quantity may be greater or less while the quality remains the same. Quantity, in other words, is, as I pointed out earlier in this paper, a mode of existence in which alteration does not necessarily affect existence. The field of corn may still be a field though its boundaries are enlarged or contracted. Now this very general category of quantity specifies itself into subordinate forms which are less abstract. But they are still characterised by what belongs to the parent category itself, and among the characteristics inherent in this parent category is the marked feature to which allusion has already several times been made.

It is of the essence of quantity and of its derivatives such as number always to be capable of presenting a double aspect, that of continuity and discretion. There is not a continuous quantity existing separately or even capable of being predicated as if real apart from discrete quantity. The aggregate of rational numbers is an illustration of the truth of this. No sooner have we found it full of gaps, discrete, than we are forced in thought to try to fill in the gaps and render it continuous. This is the genesis of the effort to regard the system of number as rendered continuous through the medium of the irrational numbers.[1] And yet the completed system of real numbers so obtained is a system in which the numbers are separable in reflexion according to their ordinal rank. All knowledge is a process of abstraction, and the language in which we embody the abstractions is never adequate to

[1] Mr. Russell says truly that even classes of finite integers can themselves to some extent suffice to generate continuity; see the explanation of this at p. 299 of his book.

the concrete individuality of the subject matter or the mutual implications of its predicates. The actual judgment of experience cannot be exhaustively analysed or shut up in any proposition. And yet, in order to study its structure and even to get clear knowledge, we must fix its predicates in thought as separable, and hypostatise them by abstraction into apparently independent realities. It is the province of logic to warn us of the real meaning of this process, and the limits of its legitimacy. We must not treat aspects, which are properly separable by abstraction only for a particular purpose, as if we were entitled, outside these limits, to hypostatise them into really independently existing realities. It is because we easily fall into such errors as speaking as though there were a continuous space and also a discrete space, that we fall into the fallacies of the "Heap" and of "Achilles and the Tortoise". It is a similar misinterpretation which leads people to assume that, because the length of a curve can properly be defined as the arithmetical limit of the sequence of numbers which represent the perimeters of a sequence of inscribed polygons, therefore this length is to be taken to be known to exist independently. The explanation of the difficulties which puzzled the older mathematicians in relation to incommensurable magnitudes is to be found in just such uncritical dogmatism about the category of quantity.

At the beginning of this paper I quoted, from the address to the Aristotelian Society which Mr. Russell criticises, further illustrations of the same fallacy in what, at all events until recently, was the current mode of teaching the Differential Calculus. I suggested that the real significance of the differential co-efficient might have been found in the continuous aspect of magnitude. For the elements in the differential co-efficient are not really separable, and do not stand for "infinitesimals". The differential co-efficient is a symbol which represents, not actual or separable minute quantities in their relation to each other, but simultaneous rates of change in x and a function of x. It stands for the relation with which x and its function, if taken to represent magnitudes, disappear, and it is because we are regarding the process as one in which quantity is taken as continuous that the ratio which characterises the relative rates of change remains even at the zero or vanishing point. What we are dealing with is, as I pointed out at the beginning, in truth and in fact qualitative relation of quantitative *principia*, which, as being *principia*, are factors or moments, but not self-subsistent quanta. If this be kept in view we diminish perplexities that arise whenever we try to regard and reason

about these moments as quanta, from the point of view in which quantity means what is discrete and nothing else than discrete.

What then, it will be asked, is the place in logic of the new method of the arithmetisation of quantity? The answer is that it is a powerful means to an end. The end is the treatment of quantity so as to do full justice to its continuous as well as its discrete aspect and to exhibit these aspects in their mutual implication. By abstraction the notion of number as representative of what is conventionally measurable is for the moment set aside. Although when the category of number is thought out it is seen to imply continuity as well as discretion, number is popularly used to represent what is discrete. It must also be borne in mind that number symbolises the discrete aspect of quantity, even when the notion of How Much is eliminated, and what is dealt with has been reduced by abstraction to mere rank, or order in a series. The series is *primâ facie* discontinuous. But the enlarged scope which the new method gives to number, and the extension of the concept to the whole domain of real numbers, brings us back to the aspect of continuity which had been lost sight of. In other words, so far from the new method eliminating quantity, it deals with quantity in its most abstract and pure form, and it takes account not only of its continuous but of its discrete aspect. The means by which this is accomplished is by making abstraction in as complete a fashion as possible from certain elements in the concrete processes of mathematics which are not essential and which hinder and do not help. It is not true that the processes even of pure mathematics are only concerned with mere logical conceptions. I cannot agree with Mr. Russell in thinking that they do not start from concrete reality. To me it seems, for reasons which I gave when discussing the process of counting, that whether we look at the methods of Euclid or at those of Dedekind and Cantor, they start from actual concrete images and proceed by making abstraction from all, or as much as possible, that is not relevant to their purpose. In this they resemble the methods of other departments of knowledge. They bring us back to relations of quantity, which because they are highly abstract are also very far-reaching, and they help us to realise in a particular region the presentation of experience as a systematic whole, the comprehension of which enables us to go far beyond what we actually experience. The category of quantity and its derivatives are the logical concepts which guide us in making the necessary abstraction.

The difficulty that arises from the tendency to mix up continuity and discretion is not new to mathematicians. The importance of what are known as Indeterminate Forms arises from the illustration they afford of the necessity of distinguishing between the two aspects of quantity. For instance $^0/_0$ and ∞/∞ are instances of Indeterminate Forms which the student has to consider carefully before he can grasp the meaning of a differential co-efficient or make a really intelligent application of the differential calculus. He must not, for example, assume that $^0/_0 = 1$, and he must, on the other hand, bear in mind the desiderandum that a function shall have a definite value corresponding to every value of its argument. By way of illustration take the function $(x^2-1)/(x-1)$. If we put $x=2$, the synthesis of the function is easy. But if we put $x=1$ the final operation may seem to result in $^0/_0$. But the student must not *in this case* assume that algebraic principles warrant him in taking $^0/_0$ to be $=1$. If we insist on the requirement that a function shall have a definite value corresponding to every value of its argument, and seek to define the value of the function in question when $x=1$, we are naturally guided by *the principle of continuity*. This leads us to define the value of $(x^2-1)/(x-1)$ when $x=1$, so that it shall differ infinitely little from values of this function corresponding to values of x that differ infinitely little from 1. We obtain as the result that, for values of x which differ infinitely little from 1, the value of $(x^2-1)/(x-1)$ differs infinitely little from 2, and the value thus specially defined is called the limit of the function. Indeterminate Forms are another illustration of how, in the higher analysis, for the consideration of definite quanta there is substituted the consideration of a different aspect of quantity, the qualitative relations of quantitative *principia*. Purely ordinal series, Cantor's Infinite, and many other conceptions used in the newest methods, are further illustrations of the same process. So is a variable, if interpreted in the new fashion. We must abstract, in considering it, from the foreign elements involved in such illustrations of a variable as that of a point moving in a straight line or a curve. The modern arithmetic continuum seeks to avoid the appeal to spatial extension or even temporal succession to make its nature manifest, and indeed those who are in earnest with it do all in their power to exclude such ideas from its conception. They confine themselves, as rigidly as human nature will allow, to simply infinite sequences determined in the continuum, sequences which they regard as a series of distinct determinations of the variable, in which the elements are in

logical succession. These sequences are the domain of the variable, and analysis is thus rendered capable of making statements that are applicable to every real number in the sequence, and which are valid for *any* particular number that may be selected. This is, as I interpret him, the meaning of the apparently paradoxical statement which Mr. Russell makes in his paper in MIND, that "a variable does not vary". It is a corollary that, as he points out, a limit belongs not to a variable but to the class of values of the variable. Now all this results from a mathematical process of abstraction which excludes irrelevant elements, just as the conception of the triangle, obtained for the purposes of geometry, excludes thickness of lines, colour, and a host of other characteristics possessed by the triangles which we recognise as such in every-day perceptive experience. It is the same process, only carried further by means of categories of a more general and less derivative character. The use of all such categories is to enable us to make abstraction of what is irrelevant and confusing, and so get clear knowledge. The result is incorporated in our conception and even in our perception or image of the real world. What is characteristic of mathematical procedure is likewise characteristic of every other form in which knowledge is advanced.

Mathematical knowledge does not differ in kind from other knowledge. It conforms to the common type. In his *Essentials of Logic* (p. 58) Mr. Bosanquet has defined the nature of knowledge in words which I will quote, for they indicate admirably the aspect which knowledge presents to the school of thought from which Mr. Russell dissociates himself, as I think unnecessarily. "Knowledge is always judgment. Judgment is constructive, for us, of the real world. Constructing the real world means interpreting or amplifying our present perception by what we are obliged to think, which we take as all belonging to a single system, one with itself and with what constrains us in sense-perception, and objective in the sense that its parts act on each other independently of our individual apprehension, and that we are obliged to think them thus. The process of construction is always that of exhibiting a whole in its parts, *i.e.* an identity in its differences; that is to say, it is always both analytic and synthetic. The objects of knowledge differ in the mode of relation between their parts and the whole, and thus give rise to different types of judgment and inference; and this difference in the form of knowledge is a difference in the content of logic, which deals with the objects of experience only from the point of view of their properties as objects in an intellectual world."

It is just so that we proceed in interpreting and constructing the object world under its quantitative aspect, whether we use the older forms of mathematical knowledge or the new. Because the new method of treating quantity is highly abstract, and makes jettison of much that is familiar in the every-day process of counting, it raises questions which appear to be novel. But the apparently new region into which we are introduced is not really as new as it is sometimes taken to be. It has been, as I hope I have shown, partially, at all events, explored by logicians. Some of the root conceptions with which it abounds are familiar to the careful student of Kant. A fuller discussion of them in their direct application to mathematical method is to be found in later writers. In Dr. Hutchison Stirling's book on the Hegelian system, one section of the mathematical discussion in Hegel's *Wissenschaft der Logik* is translated and commented on—the section which deals with the notion of the Mathematical Infinite. This is followed by a long section (*Wissenschaft der Logik*, part 2) which Dr. Stirling considered too technical to be suitable for translation in his own book. In this section Hegel examines the foundations of the calculus as they had been interpreted by the succession of great mathematicians who had written up to his own time. I am not suggesting that Hegel is to be taken as having spoken authoritatively on mathematical subjects. Nor do I doubt for a moment that in mathematical method immense progress has been made since his time, and that much of what he wrote about has been superseded. But there exists this borderland between Logic on the one hand and mathematics on the other. The struggle of the mathematician to get rid of what hampers him and is irrelevant, leads him to use a set of categories, such as number, order, measure, etc., which require the more careful treatment the more he is thrown back on their exclusive employment, and gives up the more familiar and rougher instruments which have till recently been in common use. Now Hegel has made the most complete attempt that exists to give a systematic account of the meaning, scope, and relation of these categories. It may be that he was too ambitious and was in advance of his time and, consequently, without materials which have now been, for the first time, obtained. But he would be a rash person who thinks that he can neglect the study of the warning which Hegel gave, and, at the same time, be sure that he has done the best for himself in the obscure borderland where mathematics touches metaphysics. Until the student knows what those who speak from both sides of it have

to say, he can hardly feel certain where he is going in this region.

If he does not care to give the time which is required for the digestion of the difficult books of the great German Idealist, there are more recent writers who can help him. Lotze and Sigwart are not Hegelians, nor would Mr. Bradley care to call himself so. Whether Mr. Bosanquet would or would not I cannot say. Probably no one to-day can properly be labelled with names that are a century old. But men such as these have listened to the warning which Hegel gave against the hidden perils of unconscious dogmatism. However much with them methods may differ, their purpose is a common one. Theirs is the critical attitude which is born of insight into characteristics of the real that are generally neglected. How full the path is of pitfalls the earlier history of the calculus has shown. The story of the school of Leibnitz is not without instruction for the student of to-day, whether he be mathematician or logician.

One of my difficulties in comparing the results offered by Mr. Russell with those reached by other logicians is that the comparison is but rarely of like with like. Such writers, as, for instance, Lotze, Sigwart, Bradley, or Bosanquet, look on knowledge as a process which may be broadly described as the amplification of a present perception by an ideal interpretation which is identified with and extends it, as what Lotze calls the conversion of an impression into an idea.[1] When, in order to get at the general forms of knowledge, they admit abstractions, and characterise them by signs and symbols, they are careful to insist that it is only partially that these can be taken as adequate representations of the concrete and complex reality of the process of knowledge. But symbolic logic does not observe this canon. Mr. Russell does not hesitate to shake himself free of what he calls the "psychological" reference. He does not strive to be sure that his symbols and their continuations will be pictorial of the actual processes of thought. His method is purely deductive. One difficulty about this method I have already alluded to. He nowhere explains how any advance beyond the premises is possible. He does not put or answer Kant's great question as to how synthetical judgments *a priori* are possible. But there is yet another difficulty. His method obviously has great value in dragging to light hidden obscurities, and in improving definitions. What it accomplishes beyond this it appears to accomplish by being untrue to its profession of

[1] In the chapter in his *Logic* on the Theory of the Concept.

purely deductive principle. It lapses into the process of the ordinary waking consciousness, the process of amplifying perceptions, which are not the less perceptions because they have been translated into images idealised by reflexion and abstraction. Still, the character of the method is such that the tendency is irresistible to try to use terms in senses which they do not ordinarily bear. The result is an apparent widening of the gulf which Mr. Russell supposes to exist between the work of the school to which he belongs and other schools of thought in Mathematics and Philosophy. For example he begins part v. of his book, the part which discusses Infinity and Continuity, by telling his readers that "It was formerly supposed, and herein lay the real strength of Kant's mathematical philosophy, that continuity had an essential reference to space and time, and that the Calculus (as the word *fluxion* suggests) in some way presupposed motion or at least change. In this view the philosophy of space and time was prior to that of continuity, the Transcendental Æsthetic preceded the Transcendental Dialectic and the antinomies (at least the mathematical ones) were essentially spatio-temporal. All this has been changed by modern mathematics. What is called the arithmetisation of mathematics has shown that all the problems presented in this respect by space and time are already present in pure arithmetic." Now in so far as these words affect to describe the conclusions, even about mathematics, of epistemology prior to the advent of the school of Mr. Russell, they are surely very far wide of the mark. For reasons which I have given earlier in this paper they are hardly true even of Kant.[1] And the citations already made from logicians such as Sigwart and Bosanquet show that they are not true of them. They are quite beside the mark as regards Hegel. Mr. Russell appears to labour under a misconception about the standpoint of Idealism. Its view of continuity contains, so far as I am aware, no "appeal to the mass of unanalysed prejudice which Kantians call intuition". It leaves Mr. Russell as free as I think I have shown it leaves Dedekind, to construct an ordinal theory of continuity, and if he pleases even to adopt such highly technical definitions of a continuous series as the one which he offers as a simplication of that of Cantor, that it is so when every segment, upper or lower, has a limit, and the series has a first and last term, provided that a denumerable compact series is contained in it in such a way that there are terms of this latter series be-

[1] See Herr O'Sullivan's monograph, p. 105.

tween any two terms of the original series. What Idealism affirms, and I do not see that Mr. Russell has offered any real reason for controverting the proposition, is that a highly general but accurately definable concept of quantity is presupposed by Mr. Russell's notion of order, and that his method of treating continuity is applicable only to special forms which mathematical analysis brings to light. By refinements of abstraction, perfectly legitimate provided we realise what we are about, the method concentrates on the qualitative aspects of quantity. These observations appear to me to apply to his account of mathematical infinity. It is not true as he suggests, that logicians, Hegelian or otherwise, revel in the discovery of contradictions and in pronouncing them to be incapable of resolution. When they point out apparent contradictions it is as evidence that a too narrow view has been adopted, and that a larger outlook is necessary. To put it shortly, there is much that is controversial about Mr. Russell's interpretation of philosophy, but his mathematical conclusions do not appear to depend on his being right in this interpretation, or even in his own philosophy. Yet whether or not his philosophical system will stand investigation, the scientific world owes him a debt of gratitude for a gallant effort to bring order into a region where chaos has reigned, and to throw a searching light into the obscurity which surrounds the foundations of mathematics.

In conclusion I will recapitulate: As the foundation of all mathematical method there is presupposed the judgment of quantity. In the judgment of quantity what are in point of quality like are judged as unlike, but only in respect of differences which do not affect their quality. The category or *Denk-bestimmung* which makes this possible is no mere derivative from experience, or even from order or number, categories which themselves come later because they imply the predication of the quantitative character as the condition of any meaning being put into them. The simplest recognition of order in series, the barest act of counting, involves the judgment of an identity exhibited in differences and affirmed of reality. When the elements of the series present themselves in the shape of distinct units within a continuous nature we have reached number. The concept of number thus defined is from its very nature both continuous and discrete in its character, and every logical concept which depends on quantity as its foundation has this double aspect. It is through the derivative categories of order and number, which bring into further determinateness the characteristics which are implicit in quantity itself, that we get to such fun-

damental concepts of mathematics as *order*, *series*, *unity*, *aggregate* and *correspondence*. Abstraction only enables us to arrive at these from the study of experience because they are already presupposed in experience and are part of the foundations of the judgment which sustains it. As the concept of quantity elaborates itself into these and other complex forms the principles which it embodies progressively give rise to qualitative differences, and the character of a mere sequence or aggregate of indifferent elements is replaced by that of synthesis of differences in a system or whole that is individual. That this should be so is the outcome of principles presupposed in all knowledge. They make possible the methods of the new mathematics in regard to limit and infinity, and without them the researches of Dedekind and Cantor would be logically unintelligible. Looked at from another side, even the nearest approach we can find to a purely quantitative judgment is only possible by abstraction directed to one aspect of the actual judgment. In judgments about reality lies the beginning of all knowledge, mathematical and otherwise. In the consciousness, not, it is true, of spatial extension, but of succession in judgments of quantity, and therefore in experience, we must seek the source from which the arithmetic continuum has been evolved by abstraction. Its origin is no mere deduction from exclusively logical principle.

The view of quantity just stated is what led Hegel to criticise the ideas of his day in regard to infinitesimal analysis. He called attention to the abstract and imperfect notions then current which had brought about attempts to ignore the continuous character of quantity as being a character which was taken not to be real in the same way as was discretion. He insisted that, if order was to be got out of confusion, it should be recognised that continuity and discretion were as real as they were in actual experience inseparable, and that the foundations of the calculus were thus qualitative relations of quantitative *principia*. He did not, as has been suggested, delight in finding contradictions, for the mere sake of finding them. But he held that they were inevitable for those who attempted to express what was really qualitative as quantitative. Mathematics has made great strides during the eighty years which have elapsed since Hegel wrote; the leaders in mathematical thought have in the interval emancipated themselves from much that was fallacious. But the problem of the logical foundation of mathematical method appears to me to stand much where the Idealists left it. What Hegel wrote on the nature of series, for example, is still well worth studying. It makes clear several things after which those

who have forgotten or never learned the lesson he taught, are groping to-day. So far, however, as practice is concerned, mathematicians, with a sound instinct, born of necessity rather than of action on settled principle, have given up the old traditions. As conceptions connected with quantity have progressed it has become apparent that the standard of spatial extension, which was used for the demonstration of continuity, breaks down when it is sought to exhibit completely by known methods along with continuity the correlative and inseparable aspect of discretion. The sequence of rational numbers is, on the other hand, defective on the opposite side. For the standard of the arithmetic continuum it is claimed that it exhibits continuity and discretion as correlatives and in their true relation. The completion of the continuum by the introduction of irrationals marks progress towards the bestowal on the series of real numbers of a quality which is at all events more akin to that of continuity than was the case before this completion was attempted. The variable gets a definition that can be defended on the assumption that it has prescribed for it as its domain the field of the new and completed continuum of real numbers. Within this continuum series, and classes within series, can be mapped out. When the property of exhibiting a limit is transferred from what used to be the obscurely conceived variable to the class of values which now form its domain, escape from logical confusion is made possible. The distinguished mathematicians who have discovered the new method have brought their science a stage further on in its progress towards harmony with the true logical conception of quantity. Whether what they have said is the last word, or whether a still more perfect means to this end will be hereafter devised, no man can predict. The future will not disclose its secrets, and among these is the answer to the question whether the reputation for adequate continuity of the new domain of the variable will survive the criticism of the mathematicians and logicians of that future.

II.—ON OUR KNOWLEDGE OF IMMEDIATE EXPERIENCE.

By F. H. Bradley.

In this paper I am to treat of a difficulty which arises in connexion with immediate experience. The scope of the discussion must however be limited. Problems will be raised on all sides with which here I shall be unable to deal. And even on the main point I must be satisfied, if I have shown how the question presses for an answer.

I have had occasion often [1] to urge the claims of immediate experience, and to insist that what we experience is not merely objects. The experienced will not all fall under the head of an object for a subject. If there were any such law, pain and pleasure would be obvious exceptions; but the facts, when we look at them, show us that such a law does not exist. In my general feeling at any moment there is more than the objects before me, and no perception of objects will exhaust the sense of a living emotion. And the same result is evident when I consider my will. I cannot reduce my experienced volition to a movement of objects, and I cannot accept the suggestion that of this my volition I have no direct knowledge at all. We in short have experience in which there is no distinction between my awareness and that of which it is aware. There is an immediate feeling, a knowing and being in one, with which knowledge begins; and, though this in a manner is transcended, it nevertheless remains throughout as the present foundation of my known world. And if you remove this direct sense of my momentary contents and being, you bring down the whole of consciousness in one common wreck. For it is in the end ruin to divide experience into something on one side experienced as an object and on the other side something not experienced at all.

The recognition of the fact of immediate experience opens

[1] See, for instance, Mind, N.S., Nos. 6 and 33. The reader is also referred to the index of *Appearance*, etc., *s.v.* Feeling.

the one road, I submit, to the solution of ultimate problems. But, though opening the road, it does not of itself supply an answer to our questions. And on the other side in itself it gives rise to difficulties. With regard to these there are some points which I have dealt with elsewhere, and other points which perhaps I have failed wholly to see. There are again questions which have come before my mind, but have been passed over, or at most have been touched on by the way. It is one of the latter which in these pages I shall attempt to discuss. The problem was noticed by me years ago, and Prof. Stout in my opinion did well to insist on its urgency.[1] This difficulty may be stated by asking, How immediate experience itself can become an object. For, if it becomes an object, it, so far, we may say, is transcended, and there is a doubt as to how such transcendence is possible. On the one hand as to the fact of immediate experience being transcended we seem really certain. For we speak about it, and, if so, it has become for us an object. But we are thus led to the dilemma that, so far as I know of immediate experience, it does not exist, and that hence, whether it exists or not, I could in neither case know of it. And with such a result the existence of immediate experience becomes difficult to maintain, and the problem which has been raised calls urgently for treatment and solution.

The solution, if I may anticipate, is in general supplied by considering this fact, that immediate experience, however much transcended, both remains and is active. It is not a stage which shows itself at the beginning and then disappears, but it remains at the bottom throughout as fundamental. And, further, remaining it contains within itself every development which in a sense transcends it. Nor does it merely contain all developments, but in its own way it acts to some extent as their judge. Its blind uneasiness, we may say, insists tacitly on visible satisfaction. We have on one hand a demand, explicit or otherwise, for an object which is complete. On the other hand the object which fails to include immediate experience in its content, is by the unrest of that experience condemned as defective. We are thus forced to the idea of an object containing the required element, and in this object we find at last theoretical satisfaction and rest.

This may be stated in general as the solution of our problem, and we might proceed forthwith to work out this

[1] In the *Proceedings of the Aristotelian Society*, 1902-3. I had called attention to the problem and the general mode of its solution in *Appearance*, p. 93, footnote.

solution in detail. I have however thought it better to begin by examining two difficulties well known to psychologists. My object in thus digressing is to show that our problem is not merely metaphysical, recondite and negligible, but that the principles applied in treating it cannot elsewhere be ignored. The reader can however, if he pleases, omit this whole digression as irrelevant. Of the two difficulties just mentioned the first concerns Attention and the second Introspection.

(I.) With regard to the effects of attention there is a familiar puzzle. I am going here to take attention in the sense of noticing without entering into any inquiry as to its nature.[1] We all, when our attention is directed to our extremities or to some internal organ, may become aware of sensations which previously we did not notice. And with regard to these sensations there may be a doubt whether they were actually there before, or have on the other hand been made by our attending. And, though this question may seem simple, it really is difficult. Can we directly compare attention's object with something to which we do not at all attend? To answer in the affirmative appears not easy. Can we then recall what we have not noticed, and, now attending to this, compare it with some other object? If reproduction necessarily depended on attention, any such process would seem impossible. But, since in any case this view of reproduction must be rejected as erroneous, we may reply confidently that the above comparison is a thing which actually happens. Still, asserting the possibility and the general principle, we have not removed all doubt as to the special fact. For how do I know in a given case that my present attending has not vitally transformed its result? Am I to postulate that in principle attention does not and cannot alter its object? Such an assumption, so far as I see, could hardly be justified. Certainly, apart from such an assumption, we may argue that any effect of attention requires time, and that hence, if the sensation appears as soon as we attend, the sensation must have preceded. And this inference is strengthened when we are able to pass thus repeatedly and with the same result from inattention to its opposite. Still at its strongest an argument of this kind seems far from conclusive. And in any case I cannot think that no more than this is the actual ground of our confidence when we refuse to believe that attention has made the thing that we feel.

[1] On this I have written elsewhere, MIND, N.S., No. 41, and O.S., No. 43.

I agree that in some cases we recollect our state before attention supervened, though such a recollection in most cases, I should say, is absent. And again usually, and if you please always, we have the persisting after-sensation or after-feeling of our previous condition. But, all this being admitted, the question as to the actual ground of our confidence remains. In order to compare our previous state we *ex hyp.* are forced now to attend to it, and there is a doubt whether we can assume generally that attention does not alter. We have therefore to ask whether we are in a maze with no legitimate exit, and whether such a result, if accepted, does not throw doubt on the whole subject of this article.

I will state briefly what I take to be the real way of escape. (*a*) We must first assume that anything remains the same except so far as I have reason to take it as altered. This assumption is everywhere necessary, and may be called fundamental.[1] (*b*) Next we must hold that apart from any attention we may be aware of a change in our condition. Without anything which could in any ordinary sense be called attending, we can experience a difference when a change takes place in our general or special felt state. (*c*) There is again an experienced change when attention (say to a feeling B) supervenes, and this particular experience is felt otherwise than as a mere change, say from A to B. Hence from the absence of this special feeling, as well as from the presence of the ordinary feeling of change to B, we infer that our sensation B does not depend on attention, but was previously there. We have, that is, on one side a mode of feeling when one sensation, A, merely changes to another sensation, B, while on the other side, when I attend to B, though that attention brings a change of feeling, it does not bring the same mode as goes with such a mere transition as from A to B. I therefore assume that the change made by my attending is not a change to B itself. And we may perhaps add that when, while already attending to B, I go on to observe it more specially, I may still fail to gain any feeling of change either to or from B, though on the other hand I

[1] I do not mean by this that it is ultimate and self-evident (*cf. Appearance*, pp. 601-602), for, if a thing remains, there must *ex hyp.* be some change about it. We therefore have to abstract from this change. We find a certain connexion of content in the thing, or between the thing and its context, and we take this connexion as true, and as hence not to be made false by any mere circumstance. Such a truth, like all truth, is an abstraction, and a doubt may be raised as to its ultimate legitimacy. But this is the principle which underlies and justifies our practical assumption and procedure whenever we assume that something remains the same amid change.

am of course aware of a change in myself. Now I am not suggesting that in the above we have a demonstrated conclusion, but it furnishes, I think, the ground for our view as to attention's limits. Further this view, once suggested, justifies itself in working. And it leaves us with this main result that we have feelings, such as those of change from A to B, and that, though these feelings have not been attended to, they are both real and reproducible. In any case apart from this assumption there seems to be no way of exit from disastrous puzzles.

I will now fill out this general sketch with further detail, which the reader who does not require it may omit. I feel a change, and that something has happened, say, to my finger. On attending I find that it is bitten by an insect. Of the previous sensation I have possibly enough remaining or reproducible to enable me to know that before the change my finger felt much like the others, and to enable me to repeat the change in idea.[1] I now attend to my other fingers, but they do not, on this, become bitten. There has hence been, I can argue, a felt change of my finger and an ensuing attention, the latter being felt as a different change. And by attending to my other fingers I cannot get the same result. I have neither the recalled felt change nor the present effect. My attention always gives me a felt change, but it will not give me these other special feelings, which therefore, I infer, have come to me otherwise. My present attention is in my power, but there are certain things, I find, that will not follow from my present attention. And, generalising this, I conclude that, prima facie and apart from special evidence, attention does not alter its object. On the other side I tend to assume that, where the felt change from A to B cannot be recalled, there, so far and apart from other evidence, it was absent. We obviously in all the above have no demonstrative proof. For on the one side we cannot prove that attention did not under some unknown conditions in a given case produce the entire result. And on the other side we must admit that, where the felt change of sensation was weak, its existence may now be for us irrecoverable. In arguing therefore from present defect to past absence we may well be deceived. And hence there are many cases where we have to remain doubtful. But generally where, beside the change I feel in attending, there is another recalled felt change ending continuously in the object, I conclude that the attention did not make this. And this conclusion

[1] There is, we must remember, an identical basis of feeling in all my fingers.

is strengthened by repetition under varying conditions. And it is confirmed by a mass of experience which is made intelligible by the doctrine that in general attention does not make its object. On the other hand, where the above felt change cannot be verified directly or again on sufficient evidence be inferred, I may conclude, to speak in general, that it was absent, and that the attention has more or less produced its object. If, for instance, in my finger certain sensations follow and follow gradually whenever I attend, and, further, cease as I cease to attend, and if with this there is no other change recalled or to be inferred, I argue that attention is at least in part the cause. And this conclusion is strengthened and is generalised by experiences the same in principle which can be multiplied at pleasure. And once more, though not incontestable, the conclusion is found to serve. But my object here is not to enter into detail and in consequence to provoke discussion on points intricate and difficult and on which I have no special competence. What I am here concerned with is to urge merely one main result. This problem with regard to attention must prove insoluble except on a certain assumption, the assumption of a felt change not noticed but effective and more or less reproducible.

(II.) We may pass now to a kindred difficulty attaching to what is called Introspection. Can I observe my own present state, and, if not that, what in the end can I observe? And, putting on one side all reference to attention, let us attempt to deal briefly with this puzzle. To say that my present state is not observed and that I depend wholly on memory, leads us (as in part we have already seen) into a position which is not tenable. Let us agree, rightly in my opinion, that I can reproduce that which at the time of its occurrence was not an object, yet where is the warrant that my reproduction is accurate? I can hardly postulate that here there are no errors, and how are the errors to be corrected? And on the other side, if I can thus remember my past state, it seems strange that I am unable to make it an object while present. The appeal to memory seems therefore in any case inadmissible; and further for myself I am unable to verify in introspection this constant presence of memory. To myself, when I try to observe exhaustively, say, some internal sensations, the idea that I am struggling to remember them seems even ridiculous. To myself I appear to be observing something which *is*, and, apart from certain unsound views, I have found no reason to discredit this appearance. What I feel, that surely I may still feel, though

I also and at the same time make it into an object before me. And any view for which this is impossible begins, I think, by conflict with fact, and ends, I am sure, in inability to explain facts. That I cannot make an object of the whole of my felt self all at once, so much is certain in fact, and the principle seems clear.[1] But that I can observe nothing of what I now feel, seems the false inference of a perverse theory.

But with this we are left face to face with a difficulty like the former one. Introspection is the attempt to observe my actual contents, and thus to take them as qualifying a construction called my self. To do this without residue, we agreed, was impossible, but that limitation need not trouble us. The difficulty and the problem arise in connexion with the general mass that at any moment is felt but certainly is not throughout an object before me. Take an emotional whole such as despondency or anger or ennui. A part of this doubtless consists in that which, whether as sensation or idea, is before my mind. Any such object or objects we can observe, and, when we cannot keep them in view, we can postulate that they remain unaltered except so far as we have reason to suppose a change.[2] But in an emotional whole there are other felt elements which cannot be said to be before my mind. And now I desire both to bring these before me and to know that I have accomplished this task correctly.

With regard to the second of these points we must recall some results already reached. We have to assume that a change in feeling is felt, not in general merely, but as a change of this or that character. When my mood alters I feel, not a mere difference, but my mood to be different. And, on the other side, observation of my mood is felt as a difference but not as an alteration of my mood. We may take it in general to be the case that observation does not alter.[3] Thus, when for instance in despondency I observe my visceral sensations, these feelings are translated into objects, into perceptions and ideas, but none the less, though translated, the original feelings remain. Hence (and this is the point) the persisting feelings can be felt to jar or to accord with the result of observation. For we have seen that generally in feeling we may experience the disagreement of elements. We have seen that a fresh

[1] The principle involved is this, that, in order to have an object at all, you must have a felt self before which the object comes.

[2] This is a mere application of the general postulate which we noticed before. It is unnecessary to discuss here our various special grounds for supposing the presence or absence of change.

[3] On the other side it is true that observation of my feelings may, according to the conditions, go on to increase or to suppress them. But I think that this point may be ignored here.

fact, such as observation itself, must become an element contained in a new felt whole. And thus, when I pass psychically from despondency to despondency observed, I have not only a general sense of change to something new, but I feel more specially the presence or absence of novelty and an agreement or a jar with the object before me. When to my felt emotion, that is, its translation is added, I am aware of a harmony or discrepancy between that addition and what went before and still remains.[1] Apart from theory we should all agree that, when despondent or angry, a man can feel that a description of such states is right or wrong, though he may be unable to compare this description with another object. Again we should agree that, when not despondent, a man may assent to a description of despondency, because he feels himself, as we say, into it, or may dissent because he cannot do so—and this though in neither case he could assign a special ground. And what happens here, I presume, is that the description excites feelings which tend to fill themselves out to the content of the usual felt state. And between this content and the description offered there is then experienced, as above, the sense of agreement or jar. I have not forgotten that, in order to test the truth of a description, a man may appeal to the usages of language, or again possibly may recall some definite action or other symptom, or set of symptoms, from the past of himself or another. But, apart from an appeal to present feeling, nothing of this kind, however important it may be, is sufficient by itself, I would submit, to account for the facts.

I will now in passing touch briefly on the question of means. By what means and how am I able in, say, despondency to make an object of that which I feel? I am not inquiring how we come to have an object at all, nor am I even asking as yet how feeling in general can come to be an object. The question is limited at present to the above case of an emotion, but it has a more general bearing which will show itself later. And the point of importance is this. In any

[1] I am in a certain felt state which I go on to observe. The description which results from the observation is an object added to my former felt state, and is now itself an element in a new felt state. This object gives me (*a*) a feeling of change, but (*b*) not a change of my special felt mood, say, anger. The description further, if correct, brings (*c*) a sense of harmonious addition without change, and, if incorrect, (*d*) a feeling of incongruity. If the incongruity is positive (*α*), I feel a jarring new element. If it is negative (*β*), there is still a sense of discord, since defect has a positive quality. And there is, in this latter case especially, an instability in the object induced by ideal supplementation. This instability is largely the work of that which is merely felt

emotion one part of that emotion consists already of objects, of perceptions and ideas before my mind. And, the whole emotion being one, the special group of feeling is united with these objects before my mind, united with them integrally and directly though not objectively.[1] And this, I think, supplies us with an answer to our question. For when the object-part of our emotion is enlarged by further perception or idea, the agreement or disagreement with what is felt is not merely general and suffused, but is located through the object in one special felt group. And this special connexion and continuity with the object explains, I think, how we are able further to transform what is observed by the addition of elements from what is felt. There are features in feeling (this is the point) which already in a sense belong to and are one with their object, since the emotion contains and unites both its aspects.

Finally if we reject the idea that what is felt can serve to judge of what is before us, let us consider the position in which we are left. The attempt to fall back on memory, we have seen, resulted in failure, and what else remains to us? You may say "The object satisfies me or not, and that is the whole of it and the end of it". But assenting to this very largely, if not in the main, I cannot agree that no more is to be said as to the special satisfaction. The object, you may reply, in the end is found to be self-contradictory or harmonious; but once more here, while agreeing in principle, I cannot sit down content with such a mere generality. Why, when my mood is incompletely or wrongly described, does the object go on to jar with itself and to be found self-inconsistent? There is more at work here, we saw, than the associations of language, and there is more even than any redintegration, ideal or active, merely from the object by itself. For, with merely that, there is no accounting for the whole of the agreement or jar that I feel. You may appeal here to "dispositions," and may argue that in one case my dispositions are satisfied and in the other case are restless. But if the disposition is not felt or in any way experienced, and to me is absolutely nothing but its effects, such an explanation once more seems insufficient. For in observing my mood I do not seem to be satisfied with the result, or to reject it, for no reason except that I find myself moved, I know not how, in this direction or the opposite. I seem on the contrary to myself to be engaged throughout and to be face to face with actual fact, and, wherever I dissent from or agree to an

[1] Again even on the object-side of the emotion there will of course be a greater or less extent of non-analysed content.

observed result, I seem to have a reason in this actual fact. And further I do not seem to have a mere general reason, but on the contrary something specific which I directly know and experience. The object before me is unstable and it moves so as to satisfy me; and in this point and so far we are perhaps all agreed. Where I go on to differ is that I insist that, in addition to other influences (whose working I admit), the object is moved also by that which is only felt. There are connexions of content now actually present in feeling, and these are able to jar with the object before me. And they are able further to correct that object by supplementation from themselves. And this, I submit, is the one account of the matter which on all sides is satisfactory.

We have now considered the problem offered both by Introspection and by Attention, and we have been led in each case to the same main result. These puzzles are insoluble unless that which I feel, and which is not an object before me, is present and active. This felt element is used, and it must be used, in the constitution of that object which satisfies me, and apart from this influence and criterion there is no accounting for the actual fact of our knowledge. We must go on now to deal more directly with the main question of this article. We must ask how immediate experience is able to make a special object of itself. The principles which we have laid down and have hitherto applied, will furnish us, I trust, with a satisfactory answer.

I must however, before proceeding further, try to explain what I mean by immediate experience. And I will begin by pointing out a possible sense of this term which I desire to exclude. The Unconscious or the Subconscious may stand merely for that which I do not notice or notice specially, and it may stand again merely for that which, though I am aware of it, is no object before me. But these words on the other hand may bear a more extreme meaning. The Unconscious may signify something which is more than anything which at any moment I actually feel or in any sense actually am aware of. The Unconscious, in this sense, is still psychical, and it is continuous with my psychical contents, but it is outside all that at any moment I experience as mine. The matter contained in these two compartments, of the Unconscious and Conscious, may itself be to any extent one and indivisible, and may itself thus constitute a single world. But across this matter a line of demarcation is drawn, and while on one side of this line I feel and am aware, on the other side I have no actual experience at all. Across this opaque barrier

may come to me influences or even messages, but the barrier can never be transparent. The influences or messages, to be anything for me, must take their place as elements in the region of my feeling and consciousness, and outside that region I do not experience them. They belong in a word to the Unconscious. On the other hand the barrier, though opaque, is shifting. It may from time to time be moved so as to include elements which before were outside it. And this inclusion does but embrace what before was somehow psychical, though not experienced as mine. In something like this sense the Unconscious, whatever its previous history, has been used very widely and in varying applications by German philosophy since the beginning of the last century. It attained popularity in the well-known work of von Hartmann (1869), and has lately threatened to invade our literature under the specious title of the Subliminal Self.[1]

Against any interpretation here of immediate experience in the above sense I would desire specially to warn the reader. Outside that of which a man is aware there is, I agree, a larger world of experience. The content of this world, I again agree, is in a sense continuous with that which directly fills his consciousness. But he cannot experience the former content immediately, and, were he to do so, then (as it seems to me) the man's self would be destroyed. The position of the line dividing these two worlds no doubt may fluctuate. More and less of content may come from time to time within the man's feeling centre. But so long as that centre exists, there is a world within it which is experienced immediately, and a world without it which is not in this sense experienced at all. To call this world the region of the Unconscious, in the sense merely

[1] Any one who can suppose that Mr. Myers' Subliminal Self was any discovery of his own, must, I think, either be ill-informed or else unable to recognise the identity of ideas where the language is modified and the ultimate intention not the same. The term 'Subliminal' is, I presume, the translation of a Herbartian phrase which has long been current, and with regard to the matter of Mr. Myers' book, while his industry and literary power are both unquestionable and admirable, it would be difficult, I imagine, to produce from it a single new idea. His capacity for philosophical thought can, I think, be easily estimated. Mr. Myers by his own showing was acquainted with von Hartmann's work. And yet he failed to perceive that, with regard to my subliminal self, the vital question is whether it is really my self at all, and, if so, then how far. He could not see that the problem which most pressed on him was not as to the existence of my self after death, but as to the existence and reality of my self at any time and at all. The conclusion to which I at least am forced is that in Mr. Myers' work is a collection of everything and anything which seemed to him usable prima facie as evidence for his foregone result, and that of inquiry in any other sense there is as good as nothing.

that I cannot be directly aware of it, to myself would be misleading. But in any case this world is outside of my immediate experience. Whether tracts of a man's consciousness can under any conditions be wholly split off and so exist independently, I am unable to say.[1] If however this takes place, the principle remains unaffected, for we have forthwith two or more centres of immediate experience not directly connected. I use in brief immediate experience to stand for that which is comprised wholly within a single state of undivided awareness or feeling. As against anything 'unconscious' in the sense of falling outside, this is immediate as being my actual conscious experience. And further it is immediate as against those other special and mediated developments which throughout rest on it, and, while transcending, still remain within itself. I will now, dismissing all further reference to the Unconscious, attempt briefly to explain this difficult and most important sense of immediacy.

Questions at once arise on some of which we can but touch in passing. (*a*) Was there and is there in the development of the race and the individual a stage at which experience is merely immediate? And, further, do we all perhaps at moments sink back to such a level? We all (at least usually) have in what we experience the distinction of subject and object, or at least (it may not mean the same thing) the awareness of an object as a not-self. If we like to take 'consciousness' as the state in which we experience a not-self, we may thus ask if there ever was or ever is an experience which is in this sense wholly subconscious. In such a state there would be feeling, but there would not be an object present as an "other". And we should so far not be aware of any distinction between that which is felt and that which feels. For myself I think it probable that such a stage of mind not only, with all of us, comes first in fact, but that at times it recurs even in the life of the developed individual. But it is impossible for me to enter further on the matter here (see MIND, O.S., No. 47). What I would here insist on is the point that feeling, so understood, need not be devoid of internal diversity. Its content need not in this sense be simple, and possibly never is simple. By feeling, in short, I understand, and, I believe, always have understood, an awareness which, though non-relational, may

[1] The part split off may still be united in feeling with the rest (see Prof. James, *Psychology*), and, if so, is not split off wholly. But I do not suggest that an absolute division is impossible.

comprise simply in itself an indefinite amount of difference. There are no distinctions in the proper sense, and yet there is a many felt in one. We may thus verify even here what we may call, if we please, an undeveloped ideality. And, not only this, but such a whole admits in itself a conflict and struggle of elements, not of course experienced as struggle but as discomfort, unrest and uneasiness. We may, I think, go on to add that the whole in feeling can feel itself present in one part of its content in a sense in which it does not so feel itself in another part. And of course change in its contents will be felt, though not experienced properly as change. Nor do I see reason to doubt that the laws of Redintegration and also of Fusion (if we admit such a law) will hold in this field.

(*b*) I have thought it better to deal so far with the stage, real or supposed, where experience is merely immediate. But, in order to avoid controversy, I shall in the present paper consider this no further. And for our present purpose we need not assume that such a stage of mere feeling is even possible. I shall here take experience to exist always at the level where there is the distinction of object and subject and a theoretical and practical relation holding between them.[1] I do not mean of course that this relation itself always exists for consciousness in the form of a relation proper uniting and dividing two terms. On the contrary we have no such object, I must insist, except so far as we have reached self-consciousness. And to suppose that we are always self-conscious to myself would seem absurd. It is however impossible for me here to discuss these questions on which I have entered elsewhere (*Appearance*. *Cf.* MIND, N.S., No. 46), and I must pass on to emphasise a further point which seems here all-important.

(*c*) Whether there is a stage where experience is *merely* immediate I have agreed to leave doubtful. Feeling is transcended always, if you please, in this sense that we have always contents which are more than merely felt. But on the other side at no moment can feeling ever be transcended, if this means that we are to have contents which are not felt. In a sense therefore we never can at any time pass beyond immediate experience. The object not-self, and again the object and subject related before my mind, all this is more than mere feeling. But again the whole of it would be nothing for me unless it came to me as felt; and that any actual experience should fall somewhere outside of feeling

[1] We may, as was noticed above, speak of this stage as "consciousness" in contrast with mere feeling.

seems impossible. At every moment my state, whatever else it is, is a whole of which I am immediately aware. It is an experienced non-relational unity of many in one.[1] And object and subject and every possible relation and term, to be experienced at all, must fall within and depend vitally on such a felt unity.

At any moment my actual experience, however relational its contents, is in the end non-relational. No analysis into relations and terms can ever exhaust its nature or fail in the end to belie its essence. What analysis leaves for ever outstanding is no mere residue, but is a vital condition of the analysis itself. Everything which is got out into the form of an object implies still the felt background against which the object comes, and, further, the whole experience of both feeling and object is a non-relational immediate felt unity. The entire relational consciousness, in short, is experienced as falling within a direct awareness. This direct awareness is itself non-relational. It escapes from all attempts to exhibit it by analysis as one or more elements in a relational scheme, or as that scheme itself, or as a relation or relations, or as the sum or collection of any of these abstractions. And immediate experience not only escapes, but it serves as the basis on which the analysis is made. Itself is the vital element within which every analysis still moves, while, and so far as, and however much, that analysis transcends immediacy.

Everything therefore, no matter how objective and how relational, is experienced only in feeling, and, so far as it is experienced, still depends upon feeling. On the other side the objective and the relational transcend the state of mere feeling and in a sense are opposed to it. But we must beware here of an error. We cannot speak of a relation, between immediate experience and that which transcends it, except by a licence. It is a mode of expression found convenient in our reflective thinking, but it is in the end not defensible. A relation exists only between terms, and those terms, to be known as such, must be objects. And hence immediate experience, taken as the term of a relation, becomes so far a partial object and ceases so far to keep its nature as a felt totality.

The relation (so to express ourselves) between immediate experience and its felt contents, and specially here to those contents which transcend it, must be taken simply as a fact. It can neither be explained, nor even properly described,

[1] I need not ask here if it is possible for my experience to consist of one single feeling.

since description necessarily means translation into objective terms and relations. We possess on the one side a fact directly felt and experienced. On the other side we attempt a description imperfect and half-negative. And our attempt is justified so far as the description seems true, so far, that is, as, though inadequate, it does not positively jar, and again is felt positively to agree with our felt experience.

(*d*) There are several points which I cannot discuss here, but may notice in passing.[1] The felt background, against which the object comes, remains always immediate. But on the other hand its content may to some extent show mediation. Parts of this content may have at some time been elements included in the object, and may have been internally distinguished into relations and terms. However, none the less now, this relational content forms part of the felt background. Again in the object not-self, on the other side, we may find tracts the contents of which have never been analysed. They are, so to speak, nebulæ in which the non-relational form still persists internally, and in which the complexity does not go beyond simple sensuous co-inherence. And, as we saw in the case of an emotion, the matter contained in these nebulæ, and in the not-self generally, is continuous as to its content with that matter which remains merely felt. It is impossible however here to enlarge on these questions. And I cannot ask here how far the not-self both in its origin and its essence is distinctively practical. Nor can I point out how far and in what sense we have special not-selves depending on various relations, permanent and transitory, to special selves. I must hasten onwards to attempt to deal directly with the main problem of the present article.

I will however, before proceeding, venture to repeat and to insist upon this main conclusion. Immediate experience is not a stage, which may or may not at some time have been there and has now ceased to exist. It is not in any case removed by the presence of a not-self and of a relational consciousness. All that is thus removed is at most, we may say, the *mereness* of immediacy. Every distinction and relation still rests on an immediate background of which we are aware, and every distinction and relation (so far as experienced) is also felt and felt in a sense to belong to an immediate totality. Thus in all experience we still have feeling which is not an object, and at all our moments the entirety of what comes to us, however much distin-

[1] *Cf. Appearance*, Chaps. ix. and x.

guished and relational, is felt as comprised within a unity which itself is not relational.

We may now approach the two main questions of this article. (i) How can immediate experience, we have to ask, ever serve as a criterion? and (ii) How can immediate experience itself become an object and a not-self, since *ex hyp.* it essentially is no object? The first of these questions, after what has gone before, may be dealt with briefly.

(1) I cannot, it is obvious, discuss here the general problem of the ultimate criterion. We may or may not agree that in the end this consists in felt uneasiness and in its positive opposite. That which satisfies will, according to such a view, be the general head under which fall reality, truth, goodness and beauty. But it is impossible to enter on this here, and still less to inquire as to the special characters of these diverse satisfactions.[1] What I wish to emphasise is the point that I do not take immediate experience as being in general the criterion. I am not urging that in agreement merely with this we are to find in all cases our answer to the question of truth and reality. The problem here before us is limited to a special issue. How, we must inquire, in the cases where my immediate experience does serve as a criterion of truth and fact, is it able to perform such an office?

We have already, in what has gone before, anticipated the answer. I can feel uneasiness, we found, both general and special apart from any object, or at least without regard to any object in particular. Again I have a sense of uneasiness or its opposite in regard to a particular object before me. I do not, so far, make an object of my uneasiness and hold it before me in one with the object; but so far, without actually doing anything of this kind, I feel the jarring or unison specially together and in one with the object. And we have now to ask how this felt disagreement can become a contradiction before me in the object, so that I am not merely dissatisfied with that but can go on to reject it as unreal.[2]

What is required is that the object should itself become

[1] I assume here that goodness is not to be used for the general term which is equivalent to satisfaction in general. But whether goodness is to be used in a wider or a narrower sense, is to myself a question merely of nomenclature.

[2] I cannot enter here on the question why and how in the end inconsistency is connected with unrest. Pain and pleasure, it is obvious, have here great, if not fundamental, importance. But I must pass this matter by.

qualified by the same content which was present merely in the feeling self as harmony or discord. As soon as this qualification has appeared, I have actually before me in the object that which previously was felt within me to be harmonious or to jar in regard to the object. The feeling remains as before, but it no longer is merely grouped round and centred in the object. The feeling itself is also before me in the object-world, and the object now confronts me as being itself satisfactory or discordant.

The object can gain its fresh qualification in various ways. It naturally is unstable and in constant change. Apart from what we may call external alteration, there are reactions from the subject. Even where these are non-acquired, they often tend to make the requisite change in the object. And then, as we have seen before, there is redintegration from the object both physical and psychical. This redintegration again is all-pervasive, and holds good beyond the object-world and within the region of mere feeling. Hence the object, having been continuous with what is felt in me, both generally and in special groups, becomes an ideal centre and bond. It has a tendency both to restore and to qualify itself by associated content whether foregone or present. And further, as soon as this qualification from whatever cause has taken place, the identity of the content before me and within me is felt. Thus I am no longer merely satisfied or in unrest with regard to the object, but the object contains for me and itself is that which I feel must be accepted or rejected.

I am attempting here to deal briefly with a difficult point. It is a matter which tends on all sides to entangle us and to lose itself in complications. It threatens everywhere to bar our progress by raising ultimate problems with which here we cannot deal. I am endeavouring therefore, so far as I can, both to narrow and to simplify the issue. We may feel satisfied or otherwise when we have contents felt to be harmonious or jarring, and further a perceived object may also in feeling be an element and an important element in a special felt group. Then, when the object (as may happen from various causes) itself acquires the content which before in feeling gave satisfaction or unrest, I become aware of the perceived object as that which in itself gives satisfaction or discord. And according to the nature of the dissatisfaction and of that which is done to remove it from the object, my immediate experience can act in various ways as the criterion of this object. For the felt uneasiness, until it is removed, tends naturally, as we have seen, to pass into perceived discord and unreality.

We may recur to our former instance of an emotional state. I may either be endeavouring to describe this objectively, or again it may come to me simply as my felt practical relation to an object. In either case we have, first, an object which does not satisfy, and, in the second place, we have dim uneasy feelings in myself which are not objective and before me. Let however the object from any cause —an instinctive action, a chance sensation or an oscillation of emphasis—develop its content in a certain direction, and the situation is changed. That which formerly was but felt in regard to the object has become now, also and as well, a quality of the object. And it may satisfy us because it is that modification of the object which answers to what we felt and feel. Or on the other hand the change may locate a contradiction in the object. This contradiction may bring before me that old discord which before was merely felt, or again, according to the circumstances, it may answer to a newly-created uneasiness in feeling. But in any case the object is accepted or rejected, because it expresses or fails to express the felt demand of immediate experience.

(2) From this hurried treatment of a difficult matter I pass on to deal at last directly with the special subject of this article. We must ask how immediate experience is able to know itself and to become for us an object. That such knowledge exists in fact seems to me incontestable. Immediate experience certainly cannot make an object of itself throughout and in all its individual detail. And such a result not only fails in fact to be achieved but is impossible essentially. We can however set our immediate experience before us not only in partial detail but in its main general character. We can know about it as a positive experience, an awareness of many in one which yet is not relational; and I must attempt to point out the steps by which such a conclusion may be reached. But I am not here offering any genetic account of the matter. That inquiry, however important, may here fortunately be ignored. The idea of immediate experience, once suggested, is, like other ideas, verified by its working. And all that I am concerned with here is to show that the origin of the suggestion is itself not in principle inexplicable.

(i) We can in the first place have before us as an object the idea of a complete reality. Our actual object, as we saw, is unstable, and its advance (so far as it advances) in a certain main direction tends generally to remove uneasiness and to

bring satisfaction.[1] Hence we can form (I need not ask how) the idea of an object with all uneasiness removed entirely, an object which utterly satisfies. But this means an object with nothing that is really outside it in the form of an 'elsewhere' or a 'not-yet'. The 'elsewhere' or the 'not-yet' that falls really outside the object, precludes (this seems obvious) entire satisfaction. We hence are led to think of an object without any external 'elsewhere' or 'not-yet,' an object which in some sense contains within itself, and already is qualified by, every real possibility. We form in other words the idea of an all-inclusive Reality. And this idea, being set before us, may so far satisfy us as true and real. The Reality with anything outside of it will now not merely be felt as defective, but will in addition be discrepant with its own idea. And anything now that is suggested or that can be suggested, if it fails to be there *in* our actual object, must be made somehow *of* the actual object, if at least that object is to be complete.[2]

(ii) We have thus the idea of an object which is complete and all-inclusive, while on the other hand the object actually before us is incomplete. But this perceived object is changed, and, let us here say, is changed by addition. And, with this, the source of the added elements goes on to become for me a problem. (*a*) These elements, I proceed to judge, come to me in part from the unknown not-self. This is an inevitable inference the nature and validity of which it is perhaps not necessary here to discuss. We have hence, in this unknown province, a reality which has the form of an object not-self, but which on the other side is not present actually before me in perception. And this reality must be set down as included within my complete object. (*b*) Again within that object which I

[1] I am not saying that *every* satisfactory addition to the object is preceded by uneasiness and fulfils a felt need or want. That in my opinion would be going at least beyond the facts.

[2] The reader will bear in mind that I am not asking here if the above idea is *true*. That is a question which here may be ignored. There are two points which I may notice in passing. (*a*) It may possibly be suggested that, instead of taking everything as *of* the object, I may take it as merely *together with* the object, and that this exception is fatal. But in this case I reply that the 'together has now itself become the object—an object in my judgment most unsatisfactory but still answering the purpose of the text. (*b*) Again it may be said with regard to the 'not-yet' that, given a *recurrence* of a certain character, the 'not yet' may be harmless. To this I answer that in such a case the 'not-yet' qualifies this character which recurs, and in some sense is included within this character, and that taken as really external it still means incompleteness. But, obviously, innumerable difficulties attaching to what is said in the text may occur to the reader, and must here be passed by.

actually perceive there are contained (as we saw) tracts more or less undistinguished internally. These tracts are nebulæ the contents of which have on the one hand manifoldness, but on the other hand are more or less without the relational form. They have within them adjectives which sensuously inhere and cohere, though these adjectives have not yet been ordered. But, as our knowledge increases, these sensuous wholes go on more or less to be broken up and discriminated. And the object, which of course is continuous throughout, appropriates the result of this process. Hence the object now possesses to some extent actually all its contents in a discriminated form, and for the rest it can assume (rightly or wrongly) that the same result, though not actual, is possible. The object will now include for us both its distinguished and undistinguished contents, the latter taken as distinguished ideally though not in actual detail. How far and in what precise sense it is proper to attribute reality to these unmade distinctions, we are not concerned here to inquire. It is enough for us that the idea of the complete object now includes within itself an objective 'not-yet' external to its actual detail, and again an objective 'not-yet' lying undistinguished within the fact which is given. And, having concluded so much, the self so far is satisfied with the idea before it, and it feels that this idea is somehow true and real.

Now in the above two cases (we must go on to observe) there is a difference, a difference which is felt. When an addition is made to our object from the outside we feel this addition as new. I do not mean that in this respect it does not matter how the alteration of the object is made, and that, however the addition comes, we have precisely the same feeling. I admit the diversity, but I insist that, in spite of this diversity, we have, when the object is added to from outside itself, a specific feeling of newness, and that this feeling differs from that which comes when the object develops itself from within itself. In the latter case (the case of what we called nebulæ) the content was actually there though it was not yet distinguished, and the content was already felt as being there; while in the former case (the case of addition from without) the content was not felt at all. The added features in both cases are felt as new, but in the one case these features arrive from a world which is unfelt, while in the other case the features already were somehow present in my actual awareness. And the difference between the two arrivals shows itself in each case in a different feeling. The reader who finds a difficulty here should recall the results we have accepted as true. In the first place everything, the

object included, is actually felt, and, in the second place, a change in feeling itself also is felt. All that we have added here is the conclusion, that in the two cases distinguished above there is in each case a specific felt difference.[1]

(*c*) But beyond these two cases we have also a third. An addition may be made to our object, but neither from the unknown not-self without it nor from the undistinguished tracts within itself. We saw that, when a felt emotion is described, a man may feel that the description agrees or does not agree with an actual fact of which he is aware. And yet we found that this experienced fact, by which the description is measured, has contents not objectively before the man even in an undistinguished form. The object in its wavering, and in its movement to complete itself though redintegration and otherwise, changes in directions which cause on one side satisfaction and on the other side uneasiness. And it is, largely or mainly, because these suggestions are felt to be in unison or discord with something already felt as present, that they are accepted or rejected. In something of the same way (we need not trouble ourselves here with the difference) the beautiful reality may seem to give you what you wanted, though what you wanted you did not know, or may seem to say for you what you always meant and could never express. This experience may doubtless in part be illusory. The want in part may not actually have been there before it was merged in satisfaction, and the meaning may in part never have gone before its expression. But upon the other side the experience certainly conveys to us things that were not perceived but were actually felt within us. Again earlier in this article we saw how in psychological introspection my self is put before me as an object, an object to be completed ideally. And its content, we went on to perceive, is filled up in part out of elements which I merely feel, and which in no sense are before me in the shape of an object. And we may once more remind ourselves in general how the object is continuous in substance with the content that merely is present in feeling, and hence tends persistently to complete itself by that content.

But, the fact being as above, how is the self ever to become aware of this fact or even to suspect its existence? How is the merely felt to become in that character an object? In the main, I think, this question has by now been answered. When my object is increased and the addition comes from

[1] I am of course not supposing that the consciousness which we are considering, knows at the present stage about these feelings all that we from the outside and at a later stage perceive.

that which was and is felt, there is, in such a case, first, a positive sense of expansion and of accord. And there is, next, an absence of the feeling of complete otherness and newness. We have not here quite the same experience as when the object is increased from the undistinguished not-self, but we have an experience more or less similar. This felt absence of disturbance, and this positive sense of something the same although new, prevent my attributing the change to that actual object-world which extends beyond my object. Can I then take the change as arising from the undistinguished tracts present within my actual object? Once more here, we find, the path is closed. For the feeling here, though similar, is not the same as that of which in the present case I am aware. Again, however much I develop the object in idea, I seem always to be left with a sense of defect. Further in some cases (through a persisting after-perception or otherwise) I can reproduce the special object as it was experienced before the addition. And here I find that the new feature does not in fact fall even within the undiscriminated parts of that object.

To repeat, my object, felt to be unsatisfactory, is changed and now is qualified by an addition. This addition gives a positive sense of agreement and unison. It is without the sensation of disturbance and it gives the feeling of identity with what went before. On the other side this feeling differs from that which I experience when the object is developed from its own undistinguished tracts. And in recalling the change of the object, where this is possible, there is, in passing between the earlier and the later object, a feeling of difference. And this difference remains even when I attend to those contents of the object which are not discriminated. For the above reasons I cannot set down the change as due to the object even so far as that is undistinguished.

Generally then my object is added to, and the new matter cannot be taken as without a source. But in the first place the matter is not felt as wholly new but as something already there and mine. And, in the second place, what is new cannot come from the object-world. It goes beyond my actual object, and yet I cannot attribute it to the non-perceived object-world, or again to any non-relational nebula contained within my object. The origin of my experience therefore is non-objective and it is also non-relational; but, on the other side positively, it comes to me as something which already was present to me. The idea therefore is suggested of an experience neither objective nor relational but in a word immediate. And this idea, being suggested

(no matter how it is suggested), satisfies me so far, and is accepted as true and real. The process outlined above may, if you please, contain logical flaws. Whether that is or is not the case, I am not concerned to discuss. And the true history and the real genetic origin of the idea reached, you many contend has escaped me. That would be an objection which once more I am not called on to answer. I claim to have shown how the idea of immediate experience can be brought before the mind, however otherwise normally it may be brought there. But the idea, once suggested, is verified by its working, and its acceptance does not logically depend upon the manner of its discovery.

The whole process which I have sketched may be briefly resumed thus. Our actual object fails to satisfy us, and we get the idea that it is incomplete and that a complete object would satisfy. We attempt to complete our object by relational addition from without and by relational distinction from within. And the result in each case is failure and a sense of defect. We feel that any result gained thus, no matter how all-inclusive so far, would yet be less than what we actually experience. Then we try the idea of a positive non-distinguished non-relational whole, which contains more than the object and in the end contains all that we experience. And that idea, as I have endeavoured in this paper to show, seems to meet our demand. It is not free from difficulty, but it appears to be the one ground on which satisfaction is possible.

The reader who accepts such an account of volition as I, for instance, have offered elsewhere,[1] may perhaps find our main result more evident when viewed from the practical side. Will, according to such an account, is on one hand the self-realisation of an idea, but on the other hand it cannot be resolved into any complex of elements existing before the mind. We have in volition a positive experience, which is more than any sensation or idea or any mere set of sensations and ideas with their relations and movements. If you take my state of mind before the volition, followed by the actual satisfaction with its awareness of agency, and if you attempt to confine all this within the limits of what takes place before me in the objective field, the result is failure. You perceive forthwith that in your analysis there is something left out, and that this something is a content which is experienced positively. The felt outgoing of myself and from

[1] MIND, N.S., Nos. 44, 46, 49. *Cf.* Nos. 40, 41, 43.

myself has in short been ignored. And hence comes a consciousness of defect in the object as described, and a desire for its completion. On the other side, since the whole experience is integrally one, the objective side naturally tends to complete itself ideally and to fill itself out from what merely is felt. And the suggestion of a defect thus remedied, when once it has been made, is found so far to satisfy. But I would remind the reader that, neither here nor in what precedes, am I offering a true genetic account of the matter.[1]

In some such manner it however seems possible to reach the idea of immediate experience. That experience we have seen is a positive non-relational non-objective whole of feeling. Within my immediate experience falls everything of which in any sense I am aware, so far at least as I am aware of it. But on the other side it contains distinctions which transcend its immediacy. This my world, of feeling and felt in one, is not to be called "subjective," nor is it to be identified with my self. That would be a mistake at once fundamental and disastrous. Nor is immediate experience to be taken as simply one with any "subliminal" world or any universe of the Unconscious. However continuous it may be with a larger world, my immediate experience falls, as such, strictly within the limits of my finite centre. But again to conclude from this that what falls within these limits is merely myself, would be an error entailing in the end theoretical ruin. The above idea of immediate experience is not intelligible, I would add, in the sense of being explicable; but it is necessary, I would insist, both for psychology and for metaphysics.

Its larger application would go far beyond the scope of this article. Nothing in the end is real but what is felt, and for me nothing in the end is real but that which I feel. To take reality as a relational scheme, no matter whether the relations are "external" or "internal," seems therefore impossible and perhaps even ridiculous. It would cease to be so only if the immediacy of feeling could be shown to be merely relational. On the other side relations in fact do exist and immediacy in fact is transcended. And, just as we cannot explain the possibility of finite centres of feeling, so we cannot explain how this transcendence of feeling is possible. But the fact remains that feeling, while it remains

[1] The genesis of the idea, I should agree, in the main may be called practical. I should presume it to arise when the self is identified with the body, and when we become aware of something experienced within the body which is not the body nor yet things within it or outside it. To set down this experience as being further, like pleasure and pain, non-relational, is of course a step taken only by a later reflexion.

as a constant basis, nevertheless contains a world which in a sense goes beyond itself. And when we seek for a unity which holds together these two aspects of our world, we seem to find given to us nothing but this unity of feeling which itself is transcended. Hence, as I have urged elsewhere, we are driven to postulate a higher form of unity, a form which combines the two aspects neither of which can be excluded. That such a form is given to us directly in any experience[1] I have never pretended. On the other hand against its possibility I have nowhere found a conclusive objection. And because this satisfies our demands, and because nothing but this satisfies them, I therefore conclude that such an idea, so far as it goes, is final and absolute truth. But, however that may be, I trust that the humbler contentions of this article may in their way be useful. I have felt throughout that everything here which I have been able to say, could and should have been somehow put more simply. But if, while so far agreeing with me, the reader is nevertheless led to reflect further on this difficult theme, my main end will have been accomplished. The problem which has occupied us, however sterile and baffling it may appear, threatens, if left unresolved, to bring danger or even theoretical destruction.

[1] Given, that is, adequately and as required. I am not forgetting the claim of, *e.g.*, our æsthetic experience.

III.—PSYCHICAL PROCESS.[1]

By Harold H. Joachim.

§ 1. Two senses of 'Idea' have sometimes been contrasted, and the contrast has been used to mark off the subject-matter of Logic from that of Psychology. In order to bring the problem of the present paper into focus, it will be convenient to retrace this familiar distinction between Idea as *meaning* and Idea as *psychical fact*. A rough outline will serve.

A judgment as 'meaning,' 'significance,' or 'logical content,' is a part of knowledge—so far, at least, as it is true. This 'meaning' is something 'objective,' and common to all sane intelligences.[2] It is universal; independent of particular conditions of time and place, unless they are themselves included in the meaning and thus universalised; and it is freed from the 'psychical setting,' which accompanies the judging of this or that person. The judgment—in this sense of the term—is a complex content, within which we may distinguish contributory elements of meaning as its constituent portions. Any such constituent portion is an 'idea'; and, for our present purpose, may be called distinctively a '*logical* idea'. For the further reflective classification of Logic (with which we are not here concerned) every 'logical idea' falls under one or other of a few types: it is, *e.g.*, a subject or a predicate, an antecedent or a consequent, and so forth. And in the light of another classification (with which we are again not concerned, but which is sometimes ascribed to Metaphysics) every 'logical idea' is—or perhaps we should say 'stands for'—a member of some type or other within a different group. It is (or 'stands for') a substance or an accident, a quality or a relation, a cause or an effect, and so forth.

[1] For the views expressed in the following paper (which was written for the Jowett Society at Oxford during the summer of 1906) I am of course alone responsible. But I gladly take this opportunity of expressing my gratitude to Mr. F. H. Bradley, who read through the manuscript, and made many most valuable suggestions and criticisms.

[2] *I.e.*, if any sane intelligence thinks about the matter, it must think *so* about it.

But every judgment is made by some person, and is thus a *judging*. The judgment, as a judging, is a process. It is an event, or, rather, a succession of events: a section, of a certain length and breadth, taken in the conscious life of the person judging. As occurring at, and through, a determinate time, and as a process 'in' or 'of' an individual mind, it is unique or singular. And its parts or 'steps' (the plurality of succession, which analysis may distinguish within its unity), *quâ* constituents of it, are themselves unique and singular; just as the several events, which constituted the flow of Napoleon's life, are—considered as *this* actual historical process—unique and singular constituents of a unique and singular total event.

The process of judging, as 'in' or 'of' a mind, is called a *psychical* process: and its parts are called *psychical* events or facts, or (sometimes) *ideas*. An *idea*, therefore, in this sense of the term, is a unique and singular 'step' in a unique and singular process. Such 'ideas' are the several changes 'in' or 'of' the individual mind, which constitute (or contribute to constitute) that total flow of consciousness which is the judgment as a judging.

§ 2. For the sake of simplicity, I have spoken only of Judgment. But *mutatis mutandis* the same distinction applies, *e.g.*, to Inference, to Emotion, and to Volition. The inference, as a piece of articulate meaning, is distinct from the inferring as a psychical activity: the pain of parting, or the emotion of love, from the psychical process of experiencing the pain, or of falling and persisting in love. And the processes of volition 'in' the individual agents are distinguished from the subject of moral praise and blame, the will incarnate in character and conduct or in the laws and institutions of a people.

Problems, similar in kind to those which we are to study, arise from the application of the distinction in these regions. But it would be a mistake to extend the scope of an inquiry, which—even if restricted to Judgment—is more than enough to occupy us.

And there is a topic, which may be ruled out at once as irrelevant, however interesting it might be in another connexion. For when 'psychical process' or 'psychical fact' is distinguished as singular and unique from the universal content, the terms 'psychical process and fact' may express not one factor over against another factor within a total experience, but that total experience itself viewed on the side of its existence. Feeling, willing, judging and inferring occur and exist in time and place, and have sever-

ally, in every instance, a determinate and unique position in the complex of events which forms 'the world'. What is known is somebody's knowledge, what is felt and willed is somebody's feeling or willing: and my knowledge, emotion or purpose, whilst embodying a universal content, is also (taken in its entirety as an actual experience) a part of my history. Psychical facts in this sense of the term—like all 'facts'—occupy, each of them, their definite positions in the temporal and spatial order. And, in that sense, they are severally unique and singular, however universal their content. They are studied by the historian, by the writer of biography, and by many novelists. *What exactly* is studied, and *how* the *data* for the study are obtained, is an interesting and difficult problem. But we are not here concerned with it. We do not care *where* and *when* in the world-order a judgment, inference, emotion or volition 'takes place' or 'occurs': nor are we occupied with the description of these phenomena as the unfolding of a personality. We are to examine 'psychical process' in another and more dubious sense. Within the total occurring experience, we are to suppose a distinction to be drawn and a severance to be made. A judgment, as I make it, is my judging. And this, my judging, (so it is supposed) *is* or *involves* some sort of 'process,' or 'mechanism,' or 'happening' *in* or *of* my mind. To *what* does this vague description apply? *What* is this 'psychical process'?

§ 3. If I see a red thing, or hear a chord, I do not see or hear or otherwise apprehend the processes of my seeing or hearing. Whatever those processes may be—whatever the physical and psychical mechanism of vision and hearing —at least they are not *what* I see or hear or apprehend, when I see the red thing or hear the chord. I am not aware of the image on my retina, nor of the rods and cones, nor of my organ of Corti: not aware of them, nor of any change in them, nor of any 'psychical process' (any modification of my sentience) which accompanies—or which may be supposed to accompany—these physical changes. *What* exactly I see or hear—*i.e.*, *what* is 'for me' as the object apprehended—is a problem, which fortunately we need not here investigate further. It does not matter to us at present whether we see 'colour' and hear 'sound,' or whether, *e.g.*, we see wave-lengths of the ether as colour and hear vibrations of the air as sound. All that I am maintaining is this:—When we are seeing or hearing X (colour or sound or vibrations), we do not see or hear or apprehend any process or mechanism—physical or psychical or psycho-physical—which is (or may be) involved in

our seeing or hearing X. 'We do not, in perceiving, perceive the processes of our own percipience. Whatever these processes may be, they are not something *through perceiving which* we perceive X: nor are they something which we perceive *along with* X. *For us, quâ* perceiving X, they are nothing at all.

This seems so obvious in the case of perception, that I am ashamed to dwell upon it. And it is surely no less obvious in the case of judgment. For if I judge 'Cæsar was a great general' or 'Philosophy is full of intricate problems,' there is something (as we say) 'before' my mind. In the judgment I am analysing and synthesising, and thus apprehending, a complex real. We need not enter into the difficult question as to *what* precisely I am apprehending:—*what, quâ* analysing and reconstructing, *quâ* judging, I have 'before' me. The greatness of Cæsar as a general, or the intricacy of philosophical problems:—these may be treated for our present purpose simply as 'X,' a something real—a complex object—which is 'for me' *quâ* judging. And in judging and thus apprehending X, I neither judge, nor in any way apprehend, along with X, any process of getting, or of having, X before me. The 'psychical process' of judging X is nothing *for me, i.e.* is no part of that which I apprehend in apprehending X. And if the knowledge of X—the judgment meaning X—is conditioned by a process of judging, the conditioning process itself is nothing, of which I (in judging and knowing X) am in any sense aware.

Whatever the process of judging may be, it is not something *through the awareness of which* we are aware of X: nor is it something which we apprehend *along with* the apprehension of X. *For us, quâ* judging and thus apprehending X, the process of that judging is nothing at all.

§ 4. Our apprehension of the real neither includes *for us*, nor is mediated by, the apprehension of any processes of that apprehending. In perceiving or judging, we are not aware of any changes or events 'in' or 'of' our percipient or thinking mind, whether as antecedent conditions or as part-constituents of our perception or judgment. This seems to me certain, and even obvious: and I would not have dwelt upon it, if it were not sometimes forgotten. Since, however, it may be misunderstood, and through misunderstanding disputed, I will try to anticipate a possible objection here, and thus throw this obvious (and somewhat trivial) contention into relief.

"Surely," it may be said, "in the real world, as we apprehend it, there is a factor contributed by the mind. The

world which we perceive, and the world revealed and grasped in judgment and inference, is something from which we cannot eliminate the work of perception and thought. You have made things easy for yourself, by brushing aside the question '*what* is for me *quâ* perceiving or *quâ* judging?' For if you had investigated this problem, you would have found that the subject's psychical constitution and psychical processes—the structure and the functioning of his percipient and his judging mind—are vitally concerned in that apprehended real which you so conveniently designated as 'X'."

The reply to this criticism is, I think, simple. Whether the critic's philosophy is sound or not—and I am not saying that it is unsound—his objection is irrelevant. For *suppose* that X—*what* we apprehend *quâ* perceiving or *quâ* judging—is through and through conditioned and characterised by our psychical character and our psychical processes, my position is still untouched. For what I have denied is (i) that we apprehend those processes and *through our awareness of them* apprehend X: and (ii) that we are *aware of them* as part of X which we are apprehending. And this denial can still be maintained. For let us call the psychical conditions, which are supposed to contribute to X, 'Y'. Then, the objector urges "X—if you will reflect upon it—involves Y". But I am maintaining that Y—whether 'involved' in X or not—is nothing, of which the subject, *quâ* apprehending X, is aware.

The irrelevance of the objection, in fact, is concealed by the vagueness of the terms. One might agree with the objector that the "structure and functioning of the percipient and judging mind are vitally concerned in the apprehended real," and yet deny that the judging and perceiving mind apprehended its own structure and functioning *as such*, in apprehending the real: just as one might admit that all clear thinking must conform to the Law of Contradiction, without holding that the thinker must be aware of that Law as a principle to guide his thinking, or as part and parcel of what he thinks.

§ 5. *For whom*, then, is the 'psychical process,' which we have assumed to be involved in the making of a judgment? *Who* is aware of it, and *of what* precisely is he aware? That is the next question which must be asked, and the answer is a painful one. I believe—to put the matter at once and brutally—that no one is or can be aware of 'psychical process' in the sense of the phrase in which we have been taking it. There is no such thing: or at least if there is, it cannot be known. And though undoubtedly we are aware

of something, *that*—whatever we may choose to call it—is not what we set out to discover.

Let me try to explain.

If *I*—the judging subject—subsequently reflect upon my judgment, I may detect and disengage and bring 'before' my mind certain incidents and changes, which I take to have been the 'psychical process' of the judging. In the same way, *you*—the psychologist—may reflect on my judgment as a complex incident in my mental history: and, in studying the conditions and the constituent parts of this incident, you may suppose yourself to be studying 'the psychical process' which was 'my judging'.

You and I are, in such a case, studying a new 'real'. A new object is 'before' our apprehension and judgment, which we may call 'Q'. And our judgments, in which we apprehend Q, are, as judgings, 'psychical processes' 'in' or 'of' our minds. For the original distinction, between judgment as *universal meaning* and judging as *unique and singular psychical process*,[1] will apply to every judgment, if it applies to any. In virtue of that distinction, we looked for a 'psychical process' in the judgment meaning X: and we found a judgment meaning Q. On the same principle, we must look for a 'psychical process' in the judgment meaning Q: and we shall find a judgment meaning Z. We are in fact committed to an infinite pursuit of that which, by the very terms of its conception, cannot be caught or 'apprehended,' and refuses to stand over against us as an object of our awareness. At every step of the pursuit, the 'psychical process'—*the process of apprehending*—eludes our grasp and leaves us in possession of an *object of apprehension*. What we set out to study, was—as we imagined—the living process of a judging mind: the unique and singular series of changes which is that mind's thinking. In making this 'psychical process' an object of study, we have disengaged it from the mind whose process it was. We have removed it from the atmosphere in which it drew the breath of its life: and 'it'—the real object of our search—has ceased to be. And whilst we suppose ourselves to have *it* 'before us,' our study is fixed upon a lay figure, a thing of straw and stuffing, a caricature of the living process. *That* has slipped away:—only to revive, in a mocking reduplication of itself, as the process of our studying.

§ 6. There is a well-known form of self-hypnotism by which, if we ponder on even the commonest words of our

[1] Above, § 1.

vocabulary, we shall doubt their spelling, or their customary meaning, or perhaps doubt in the end whether they are significant sounds at all. Similarly, there is a kind of dialectical reflexion, which brings the most elementary distinctions—the most solid and familiar facts—into a whirlpool of movement. *There*, everything proves self-contradictory, and, turning confusedly into everything else, crumbles away into nothing.

Now this—it may be suggested—is what is happening in the present case. For 'psychical process' and 'psychical fact' may perhaps be ill-chosen expressions: but the phenomena, which they indicate, are real, and no amount of dialectical criticism can remove them from the universe. Prove that a 'psychical process' is, by the very terms of its conception, neither 'for' the subject nor 'for' anyone else. Prove that 'to be itself' is incompatible with its being known: and that 'to be known' conflicts with its being *that* which it is to be known as being. The contradiction lies in the confusion of your thinking, and does not touch the facts. The facts are there, solid and unyielding and unaffected by the dialectical movement. For can it be denied that there is a sense in which judgments 'occur'? Or that their 'occurrence' (the judging) is a process of thinking and a functioning of the mind? Or that the phenomena thus indicated—their conditions and laws—are possible objects of systematic study, forming indeed part of the subject-matter of an actual science?

Undoubtedly the facts—*some* facts, at least—are there, and undoubtedly they are studied. But it is no empty question to ask *what* are these facts, and *what precisely* is studied? And it was against one answer to this question that we were arguing. For the 'facts' were characterised (in contrast to the objective and universal meanings) as unique and singular processes of the individual minds: and these—the unique flow of an individual consciousness, and its unique parts or constituent 'ideas'—were to be the objects of study. Such a psychical process, and such ideas (we argued) are nothing: or if they are anything, at least they are not possible objects of knowledge for anyone.

"In that case," it will be retorted, "your discussion is waste of time. You have been forcing open doors, and tilting at windmills. For the distinction itself is harmless and indisputable, if rightly understood: whilst the abuse of it, which you have been attacking, is nowhere to be found.

"In the judgment 'Cæsar was a great general' there is affirmed a complex meaning. And this affirmation of mean-

ing, as common and universal, as the meeting-ground of all intelligences, as true or false, is a piece of knowledge or of error, and comes under the study of the logician. But the apprehending and affirming of the meaning is something singular and unique: and the judgment is in this sense a judging, an operation severally performed by each intelligence. If I am to judge, I must bring the complex meaning before my mind, and affirm the cohesion of its parts: and in so doing, I must pass through complicated 'psychical processes'. I must apprehend the several constituents—the 'logical ideas,' *e.g.*, *Cæsar*, *General*, *Great*—and I must apprehend the manner of their cohesion, and affirm them in their cohesion. All this—*as it actually occurs*—is a unique and singular process, inseparable from the mind whose process it is. But it nevertheless exhibits a certain general character, conforms to certain conditions and laws, and exemplifies certain typical dispositions and functions of mind. This —the common character, the general conditions, the typical functions, involved in the singular processes—is the subject-matter of Psychology. For every science must in a sense reflect upon the singular and unique. But every science disentangles, from this material of its study, the common nature and the universal laws which are, as it were, the *substance* of the singular phenomena. In this respect the procedure of Psychology is the same in principle as that of other sciences, and is fully justified by its results. For it has analysed this singular process, whereby the individual mind transcends the limits of its singularity and grasps what is universal. It has discovered and named a world of distinctions within the seemingly simple phenomena, from which its investigation started. Thus it has distinguished different types of *ideas*, *images*, or *symbols* as constituent 'steps' in the processes of the different types of mind, or of the same mind as it thinks of different types of thing. It has laid bare the conditions which determine the 'association' of these 'ideas,' the different principles of connexion which operate in the psychical mechanism. It has distinguished, named and described the typical functions of the mind as displayed in the more complex structures—the 'set pieces' —of its self-expression, in *imagination*, *memory*, *recollection*, *inference* and so forth. And by tracing the principles of interrelation, the affiliation and evolution of the different mental functions and processes and structures, it has brought the whole to order and system."

§ 7. The above, I am well aware, is a most inadequate outline of the work achieved by Psychology in a small corner

of its field: but with that work we are not directly concerned. The appeal to it is irrelevant, or perhaps an attempt to prejudice our inquiry. However much we may admire the success of Psychology, we still have our problem to reckon with. For the magnificence of a superstructure cannot of itself guarantee the solidity of its foundations: and we do not even know that these 'psychical processes' *are* the foundations of Psychology. They may be neither the materials from which it starts, nor the foundations of its building, but confusions and misconceptions which have no place in any science. Or, if indeed some psychologists have built upon them, and they prove unstable, Psychology can be trusted to deal with the situation, to repudiate and, if necessary, to reconstruct.

Only one fresh point has been urged in the above defence of 'psychical processes,' if we eliminate the bare assertion that they are 'solid facts' and the appeal to the results of Psychology. A severance is still made between *what* the mind thinks and the process of its thinking. *What* it thinks is a logical content, true or false, knowledge or error; and is relegated to Logic. The 'solid facts,' which are to remain, are certain processes of thinking and certain 'steps' in those processes. These, *as actual*, are 'singular and unique,' and thus (in accordance with the original distinction) sharply contrasted with the universal and common meaning, the 'logical content' and 'logical ideas'. But the 'singular and unique,' we are *now* assured, is merely the starting-point of an inquiry, which (as a 'science') studies its 'substance'—its common character and typical forms, its general laws and conditions.

Now, *in what sense* are these processes 'singular and unique'? On this, as it seems to me, the whole matter turns. For there is a sense in which all phenomena are 'singular and unique'. All phenomena, we may say, as they actually occur, are severally fixed in determinate positions within a complex of relations. And each of them is particularised by reflecting, with an 'emphasis' differentiated by that position, the inexhaustible detail which constitutes their common setting.[1] But the 'psychical processes' are 'singular and unique' in a further sense. For any actual thinking is, as a 'psychical process,' inseparable from the individual mind. It is 'unique and singular' not merely or primarily because, as occupying a determinate position within a complex system, it reflects the inexhaustible variety of its

[1] *Cf.* above, § 2.

setting *from this and not from that* angle. Its 'unique singularity' is the privacy of the 'individual mind': a privacy of exclusive 'being-for-self,' which is assumed to constitute a mind's 'individuality,' and to cover all its inner modifications. What is 'singular and unique' in this sense cannot be 'given' or 'apprehended,' and cannot serve as the material from which a science disentangles universal laws or the typical forms of a common nature. Its very being is to be inaccessible. For no curious observer can draw the curtains of another's mind and peep at its inner workings: and not even the judging subject himself can here act the part of Paul Pry, observing the secret processes of his own judging. Such psychical process is so singular that it eludes every one's grasp and baffles all description. It is so unique, that one may doubt whether it occurs even once.

§ 8. At the risk of insisting on the obvious, I will illustrate this distinction between the facts, which are *data* for scientific investigation, and the supposed 'facts of mind'. We are to assume—rightly or wrongly—that there is an 'individual mind' *of* or *in* which these processes are: for without this assumption the whole position vanishes. Suppose, then, the mind were an inorganic thing—a piece of iron, *e.g.*—whose behaviour under certain chemical conditions we wished to study. *This* piece of iron is unique and singular, and different from every other thing in the universe. But its unique singularity is not a being-for-itself, an inner privacy of self-feeling. Even if we imagine it to enjoy an exclusive individuality of this kind—an individuality analogous to that which we ascribe to ourselves and, with more hesitation, to the animals and perhaps to the plants—no man of science, no chemist, biologist or botanist, would regard such recesses of incommunicable being as objects of study, or regret his inability to enter into them. And if this piece of iron is 'uniquely singular,' *quâ this* determinate reflexion of an inexhaustible setting, it is not *so* that we observe it, when we make it a starting-point of chemical inquiry, nor *as such* that Chemistry endeavours to know it. We see, or infer by the aid of experiment, a succession of changes, of displacements of constituent particles, culminating in a determinate structural rearrangement. *What* we see, may be unique and singular: but we do not see it in its unique singularity. *That* it is unique and singular, in the sense that, if the universe were exhaustively known, *it* would be exhaustively known too, and would be revealed as an individual constituent in the individual system which is the universe: this may or may not be the case, but it does not concern

our chemical inquiry. *For that* a more limited vision is sufficient. The piece of iron and its processes, as *data* for Chemistry, are a limited group of properties and changes, observed in the rough, in a general and typical form, without that minute differentiation which, as *these* unique and singular facts, they no doubt possess. We observe just so much, and just so precisely, as is required for the formulation of the law: "Iron (such and such a chemical element) under such and such conditions combines with such and such other elements to form such and such a compound: and the process in, or of, the elements is such and such a succession of displacements culminating in such and such a structural rearrangement".

And if the mind were a piece of mechanism, we should have a *datum* before us, a perceptible thing, with a typical structure and with laws of its working to be ascertained by observation and inference. Even if we had nothing before us but *this* 'unique and singular' watch, and were ignorant of the purpose determining the material, shape and adjustment of its parts, we should not necessarily be at a loss. For, if it were set going, part would be seen acting on part, and a series of displacements occurring. And if we hesitated to infer "such and such an ordered arrangement of such and such materials results in such and such a regular movement of the hands and is intended to mark the time," our hesitation would not be due to the 'unique singularity' of the *datum*. We might, in our ignorance, hesitate to infer the actualisation of such a purpose anywhere. But if we accepted it here, we should not hesitate to generalise; or rather, in accepting it, we should already have generalised.

Kant, it will be remembered, proposes[1] to 'set the mind going' in order to ascertain its 'faculties': the 'play' of the mechanism is to reveal the nature of its parts and the principles of their adjustment. But he meant that the nature of mind is manifested in what it does: that we can infer its distinctive 'powers,' only if we set it at work judging, feeling and willing, and study the results. He never supposed that the "inner psychical process" could be separated from the meaning apprehended, or from the content felt or willed, as the movements within the watch are separable from the revolution of the hands on the face. And he certainly did not suggest that by observing the mental machinery at work—by looking (so to say) at the wheels going round in

[1] *Cf. e.g., Kr. d. r. V.*, 2nd edit., p. 91; *cf.* also *Kr. d. Urtheilskraft*, Introd., p. xxxi.

the mind—one could formulate a theory of the typical forms and general conditions of such "psychical process".

Now, I am not here questioning whether, if we could apprehend the psychical process of any one individual mind, we should be entitled to generalise (or should perhaps already have generalised) from our *data*. I am maintaining simply that the supposed *data* are not forthcoming. The 'psychical process of an individual mind,' if such there be, is *ex vi terminorum*, not capable of being 'given' to that mind itself, or to any other mind. And if the psychologist attains to knowledge of the nature and functioning of mind, the knowledge which he acquires, and his method of acquiring it, must be other than we have been supposing.

§ 9. We talk of ideas 'occurring to us,' 'flashing through our mind,' being 'fixed in our head'. 'Trains of ideas' rush through consciousness, impressions 'crowd' upon us, and images 'jostle' one another, or are 'stored,' in our memory. We naturally lapse into the coarser and more familiar categories, and should be indignant if our metaphors were taken seriously. The mind, we are all agreed, if it is anything at all, is not an extended whole. It is not—not even from 'one point of view'—a one containing a plurality in spatial juxtaposition, nor a place successively occupied by a shifting manifold. It is one: but the unity is changing, and changing *so* that the changes are modes of the unity. It is a one-of-many: but the plurality, whether simultaneous or successive, is phases of the one, and the one is 'one' only in these its phases or 'inflexions'.

But if this is what we mean by a 'mind,' a mind is not that *in* or *of* which processes are, nor that which owns variety and change as its properties. It is not a 'thing' or a 'substance,' but essentially itself a process. It is itself variety and change: but the variety and the change are the modes and inflexions of a one, which is 'one' only in its inflexions, and is *for itself* only as reflected upon itself in them. This is what we are for ourselves at the most elementary level at which we experience 'ourselves' at all:—at the level of 'self-feeling'. *There* our 'self' is a 'scale' of feelings; a unity of feeling of which the many feelings are the inflexions, and a unity which is 'one for itself' (a 'feeling of a self') as returning upon itself throughout the plurality. And here, it may be said, in this unity reflected upon itself in its inflexions, we have the type of what is called 'psychical process' and the clue to the 'psychical process' of judging. For if the 'inflexions' are modifications of a unity of awareness, if 'modes of awareness' are sub-

stituted for 'modes of feeling,' the process is the mind *quâ* judging: and we have found the object of our search. The mind in judging apprehends X: but, *quâ* judging, the mind is an awareness differentiated through many modes, and 'one' for itself by reflexion upon itself throughout these inflexions. In this differentiated and reflected unity of awareness, the mind *is* Y, the process of judging whereby it apprehends X. The mind, as we rightly insisted,[1] is not aware of Y as that through which it apprehends X, nor as part of X. But the mind, in apprehending X, *is* Y: and Y is a differentiated unity of awareness.

Before, however, we congratulate ourselves on our success, it will be as well to consider what we have discovered. An 'awareness' is essentially an awareness of something: and 'modes of awareness' are distinguished as awarenesses of different things. No doubt the expression is a vague one: and we speak, *e.g.*, of 'feeling' and 'thinking' as different 'modes of awareness'. We are then laying stress primarily on the *form* of apprehension: but even here (if we will reflect) the difference of the 'form' conditions, and is conditioned by, the difference in the 'matter' apprehended. We may feel the beauty of a work of art: and on the other hand, at a different level of experience, in a different 'form' or 'mode' of awareness, we may attain to an intelligent or 'thinking' appreciation of it. But the two experiences are different through and through. And nothing but confusion of mind and looseness of language could lead us to suppose that the object apprehended is 'the same,' and that the difference lies solely in the form of apprehending.

Nor are the 'steps' of the psychical process of judging '*modes* of awareness' in this more general sense. The 'awareness' in question is a unity of thinking, and its modes are 'inflexions' of it. As such, they are different thoughts, *i.e.*, *thoughts of different things:* for thus, and thus only, is thought differentiated.

So the new phrases conceal after all no very startling discovery, and our results may be stated more simply as follows.

The mind apprehends many constituent elements as contributing to a single meaning. This single meaning, developing for the mind throughout the many constituents which it apprehends, is, in the fulness of its development, X—that which, in its judgment, the mind affirms and knows. The many constituents, through which the meaning develops,

[1] Above, §§ 3, 4.

are different objects of thought to the mind, and thus 'differences of its thought' or different 'modes' of its apprehending. And as returning upon itself through the modifications of its thought, the mind is *for itself* a judging process, *i.e.*, is aware that it is judging and knowing X.

If we compare this account with the description with which we began[1] we may say *either* that the distinction between 'process of apprehending' and 'object apprehended' has now, to all intents and purposes, vanished: *or* that we have introduced the notion of 'process' into our conception of the 'object' apprehended. For what we are now describing as Y—the process of judging X—is X itself, with the reservation that X, in its development and in its completeness, is 'for the mind'. The reservation is made: but there is no attempt to explain or to analyse the 'apprehending' of the mind, or that aspect of X in which it is 'for' the mind. The whole emphasis is now laid on the differences within the development of X. For X is now described as the emergence of a single meaning, developing through a succession of different contributory meanings. The 'steps' in this 'process' are, in fact, 'presentations' to a mind, different objects of thought. And perhaps it is these—or some of these—which the psychologist discriminates as 'Images,' 'Ideas' or 'Symbols'. He is describing certain kinds of object which 'pass before the mind,' the differences in the order of their passing and the conditions of their grouping. And the phenomena thus described are without doubt important subjects of study. In certain experiences—*e.g.*, in Reverie—they form perhaps *the whole* of that which we apprehend: and in many other experiences our primary and main object of apprehension is complicated by the mediation of these as contributory elements. But these Ideas, Images and Symbols, and their grouping and interrelations, *if we retain the distinction between process of apprehending and object apprehended*, fall always on the latter side of the division: and thus, in describing them, the psychologist is doing the work of the logician. He is studying a portion of the subject-matter of Logic, mapping out a few of the districts within the logician's territory. And he is doing so imperfectly, in so far as he does not recognise fully *what* he is doing. He is studying phenomena essentially subsidiary to the more complicated phenomena, which he assigns to Logic. For Reverie, Memory, Imagination, etc., are rudimentary forms of knowledge, 'modes of thinking'

[1] § 1.

in which we indirectly and imperfectly apprehend the real. And if they are to be thoroughly understood, they must be viewed as Logic would view them, *viz.*, in their relationship to the more developed forms in which the 'logical' endeavour—the endeavour to know—is more fully explicit and conscious.

§ 10. "But after all," it will be said, "we *do* think 'in' words, or ideas, or images, 'in' symbols or schemata of some kind. If we recall an absent friend, or if we think of a universal meaning, images unique and detailed pass before our mind, and mediate our thought. The succession of such unique images 'in'—or, if you prefer it, 'before'—our mind, is the process of recollecting or conceiving: and the laws of their succession and association, together with the principles of their representation of the 'meaning,' are the subject-matter of Psychology. Psychical processes and functions—Reverie, *e.g.*, Recollection, Conceiving and Judging—doubtless present problems to Logic, and Psychology cannot exhaust their whole significance. But Psychology studies a determinate aspect of such facts, and its description possesses a determinate and independent value."

Now the statement that we think 'in' ideas or images or symbols is ambiguous. (1) We should all agree that thought is inseparably one with its determinate inner expression: that it is embodied and incarnate, and that 'pure thought' —thought *absolutely* unexpressed and indeterminate—is nonsense. But this truth, or truism, is irrelevant: nor is it well expressed in the statement that "we think *in* ideas". For that invites misunderstanding. It suggests the absurdity of a naked and shivering thought, waiting to select (from the wardrobe of the mind) the clothes, in which it may make a decent appearance. We do not 'think in ideas'. Ideas are nothing unless quick with thought: and *thus*, they are the incarnate life, the besouled body, which *is* our thought. (2) And if it is meant that always—or, at least, often—we apprehend our main object mediately through the apprehension of something else, the statement, however true, is nothing to the point. For if we study the secondary or 'mediating' object, we are still not studying the *process of apprehending* in any distinctive sense, which would entitle us to assign our work to a distinct science. We are studying one kind and one level of thought, *i.e.*, of 'meaning' for a mind—and our study is part and parcel of Logic. There need be no quarrel about names: and provided we recognise the character of the science, and that it is *one*, we need not dispute whether it should be *called* Logic or Psychology.

And though we cannot here profess to explain the character of the science, we may indicate it by saying that it studies the developing and developed meaning which is significant thought, and does *not* study 'process of apprehending' or 'object apprehended' in severance from one another.

(3) But the statement that we 'think in ideas' means, we may suspect, neither that our thought is concrete and incarnate, nor that in some experiences ideas and images are the objects apprehended. It means that we apprehend the real through a veil of our own ideas. And this veil has an inner and an outer side, and fulfils a double function. For the ideas, images, or symbols are *both* states of our mind, modes of our own apprehending consciousness, and so unique and singular: *and also* objects apprehended, symbolic of objects other than our own states, presentative or mediative of the 'real'.

But the veil on its outer side (the ideas as objects apprehended) clearly belongs to Logic: and on its inner side (the ideas as modes of consciousness) it is *possibly* 'for' the thinker himself, but *assuredly* 'for' no other mind.

The whole theory, indeed, if I have rightly understood it, is radically false, and even dangerous. For we have a succession of modes of consciousness, the unique and singular steps in the unique and singular process which is our apprehending. The phases of this process, as phases of apprehending, are reflected on themselves: *i.e.*, the process is, through and through, an awareness with itself for its object. Its 'steps' are at one stroke phases of awareness, and that of which those phases are aware. And if this be so, by what possible method are we ever to get beyond our own self-feeling? *What* we are aware of, is, and remains to all eternity, a phase of our own awareness; and it cannot even be awareness of something *as our own awareness*, for that would imply distinction from something not our own, not a phase of our self.

On the other hand, if we emphasise the other moment in the see-saw of the theory, we have a succession of ideas, which, *quâ* objects apprehended, are over against, and distinct from, the apprehending. The apprehending is the pure white light of inner vision, before which the variegated show of 'images' is displayed. The process of judging is the procession of changing objects passing before the unchanging 'eye' of the mind. And yet this procession is somehow *also* a series of mental states. It passes 'through' the mind, perhaps, or occurs 'within' it, and its members are 'ideas' or 'psychical facts'. The name, aided by the

magic of this 'through' and 'within,' completes our delusion. We suppose that 'objects,' which *as ideas* pass 'through' the mind or *as psychical facts* occur 'within' it, are more akin to thinking than 'the real,' the 'X,' the apprehending of which was to be explained. But if our awareness of X requires explanation, the interposition of an 'idea' between X and the mind is of no assistance. For if the 'idea' is apprehended, *its* apprehension is no whit more intelligible than that of X. Whilst if the 'idea' is not an object apprehended, but a phase of apprehending, it is the idea which apprehends X; and *that* has to be explained. And if, finally, the idea is *both* apprehending *and* apprehended, we are fairly committed to a theory destructive of all knowledge and all reality—to subjective Idealism in its purest and most paradoxical form.

§ 11. Let me briefly recapitulate. I began by setting out a common distinction between 'logical content' as universal and objective, and 'psychical process' as unique and singular and peculiar to the individual mind (§ 1).

This distinction may be used in a sense with which I have no quarrel, or with which at least I am not at present concerned. For it may be meant merely that the apprehended meaning *as a whole* is, from one point of view, some individual subject's experience, and considered *thus* is 'psychical process'; whilst, taken in abstraction from this its occurrence, it is 'logical content'. That there is 'psychical process' in this sense is no doubt true: the real *quâ* known is known by somebody, and may so far be considered as part of that somebody's history. The same applies, *mutatis mutandis*, to the real *quâ* willed and *quâ* felt. Many novelists (Balzac, *e.g.*, or Henry James), many historians and writers of biography may be said to study and describe 'psychical processes' and 'psychical facts' in this sense of the term. Exactly what they are describing, and how they get their *data*, are interesting and difficult problems: but I am not here attempting to raise them, and I ruled out this sense of 'psychical process' in § 2.

The distinction, however, which was set out in § 1, may be used in a totally different way. It may mean to sever, *within my knowing X*, the *X known* from my *knowing*. And I proceeded to inquire what a 'psychical process of judging,' characterised in terms of the distinction *thus* used, could be. I concluded that if, within my knowing X, the process of knowing is severed from the content known: and if the 'psychical process,' which the distinction contrasts with the logical content, is such a severed process of knowing:—then

'psychical process' is either nothing at all, or at any rate nothing which I or anybody else can study (§§ 3-5).

In § 6 we reviewed the situation. We supposed the severance between object known and process of knowing still to be maintained. But it was suggested that nevertheless such 'psychical processes' might be the *data* of a scientific inquiry. All sciences, it was urged, start from facts which are singular and unique: and the psychologist might use these uniquely-singular 'psychical processes' as the *data* from which to begin his investigations.

We examined this defence in §§ 7, 8. We endeavoured to explain in what sense the facts of science are singular and unique, and why *their* 'unique singularity' does not interfere with the scientific study of them: whilst, on the other hand, the 'unique singularity,' which was supposed to characterise 'psychical processes,' would effectually prevent any apprehension of them as *data* for a science. 'Psychical facts,' we might say, as so interpreted, are a contradiction in terms: for *quâ* 'psychical' they cannot be 'facts,' and *quâ* 'facts' they have lost the characteristic in virtue of which they were 'psychical'.

In § 9 we tried to develop the contrast between 'perceptible things' and a 'mind' (a contrast sometimes obscured by the metaphors of popular phraseology), and, on the basis of this contrast, we suggested a new description of the 'process of judging'. But we found that, in this new way of looking at the matter, the distinction between 'psychical process of judging' and 'content judged' vanishes altogether: or, if it is in any sense retained, the whole subject-matter of study falls on the side of content. And in place of two sciences, we have but one—a more concrete science of Logic.

Finally, in § 10, we considered an appeal to our common sense, the appeal that "clearly we *do* think in ideas". We exposed the ambiguity of the phrase; and we showed that it does not express any facts, which would support the conception of psychical process attacked in our preceding arguments

§ 12. This paper has moved within very narrow limits, and its upshot is 'much cry and little wool'. It has criticised conceptions, which few people seriously hold, and which perhaps no one would willingly acknowledge. Yet these 'conceptions'—if confusions of this kind deserve the name—seem to me to lurk in much current philosophy, and to wander at large in popular thought. And if here I am mistaken, and am judging others by the frailties which I detect in my own thinking: if no one but myself is ever in

danger of sinking into this swamp of confusion: at least I may hope to provoke discussion, and to be lifted by criticism into the purer air and on to the firmer ground, where more fortunate thinkers are accustomed to move.

Let me, in conclusion, venture to make a suggestion. It has sometimes been supposed, to speak broadly and in the rough, that the psychologist studies the processes and functions of consciousness, the elements of mind and the laws of its mechanism. He reflects upon his own thinking, feeling and willing, upon that of other persons, and, so far as it is possible, upon that of the animals. And he may thus attain to a systematic exposition of the general nature of mind, and of the stages through which it necessarily passes in the course of its evolution. Sometimes (if report is to be believed) the prospect of this attainment has proved too much for the sanity of the psychologist: and Psychology, no longer content with the position of a 'special science,' expands into the *scientia scientiarum*, which subordinates to itself all philosophy. For ideals of art and conduct, religious beliefs and metaphysical theories: what are these but inevitable products of the mechanism of mind at certain levels of its development? And so, in this nightmare of a theory, philosophy and all its branches—and, I presume, science as well, and psychological science into the bargain—will appear 'in their right place' as corollaries and applications of Psychology.

Now I would suggest that Psychology should begin, so to say, at the other end, following the example which Plato set in the *Republic*, and which Hegel fulfilled. The personality of the moral agent is revealed in the moral system, in the social fabric, which it makes and sustains. The personality of the thinker—the nature and functions of mind as cognitive—is 'writ large' in knowledge. And mind as emotional is broadly expressed in art and religion. In Art and Morality, in Religion and Knowledge, the nature and functions of mind are plain to read: and from the study of them, the study of mind should start. Such a Psychology would be essentially part of Metaphysics. For its subject-matter would be the most developed and most significant manifestations of the real:—mind incarnate in the universe at the level and in the forms of its self-conscious expression.

IV.—A MODERN BASIS FOR EDUCATIONAL THEORY.

By W. H. Winch.

I. Introduction.

Persons who "rush in where angels fear to tread" are frequently described by an epithet which is uneuphonic and contemptuous. The proverb is an impressive one, and it was only when I reflected that, after all, angels, being probably indifferent to educational theory, would have neither fears nor hopes on the matter, that I mustered courage to proceed. For I was painfully aware that since the dawn of civilisation —and there is no reason to suppose that even the cave-men were unanimous—educational theorists have been split up into parties, each loving its own ideal of education more or less fervently, each hating, as worse than no education at all, the ideal of the opposing theorist. Glance through such a book as Compayré's *History of Pedagogy*. There is a kind of sea-saw through the ages: one educationist puts forward a series of opinions and recommendations which the next one despises and contradicts.

But that was a long time ago. Is that the case to-day? Listen to a discussion between a disciple of Herbart and a disciple of Froebel. Take the prevailing educational doctrine at any three or four of our Universities, say at London, Oxford, and Edinburgh, and you will find grave differences, even of the very fundamentals of educational theory.

But, having decided to try to establish a basis, or rather, to indicate how a basis may be reached, one may first be required to justify the possibility of the accomplishment of his task. It is not enough for a philosopher to know something; he must give the ground on which his knowledge is based; indeed, he may be required to go further, and demonstrate the possibility of anybody knowing anything at all. But perhaps 'anybody' is too sweeping; the critic is always knowledgeful *ex officio*.

But I am not now going as far as that; I shall be content with a much less comprehensive demonstration. Demon-

stration, in sooth, it will hardly be; since I have confessed at the outset that even a superficial survey of the educational world of to-day reveals just the same conflict of whirling words, just the same old controversies, just the same confidence in party as ever before. The names have changed, the parties persist.

How can we hope to escape from the quarrels of the ages? "You have, yourself," my critic might say, "in a cursory but hopeless chapter,[1] pointed out that discussion is not likely to end educational disputes; and that, whilst such words as liberal and conservative, idealist and realist, continue to have meaning, there can be no uniformity of educational theory."

We cannot entirely ignore an answer not given quite so frequently as formerly in reasoned treatises, but still vitally operative in the teaching world. "Back to the master," is the cry. It is not, of course, always the same master; but, as each group acknowledges only one master, there is no confusion in the minds of those who use the words. Still the answer does not afford a basis for general agreement.

Now I neither wish to argue that this worship of the masters of the past is due to an especial endowment of original sin, nor to glorify the spirit of progress, nor to talk about the heresy of looking backwards. I know how popular reform is just now, even with the conservative party. All that powerful sentiment which, in England at present, is enlisted on the side of change I definitely refuse to avail myself of. But I oppose the attitude of mind expressed in this hero worship just as I do that of party worship; and for the same reason: briefly, this,—that no adequate separation is made of ideal from fact; hope and evidence are confounded together. We see frequently, amongst even the better informed writings of the press, such sentences about education as, "we wish the children to be taught cookery at school so that they may make good housewives when they grow up". Any one who suggests that cookery is out of place in schools is at once set down as a person who decries marriage, despises the family, and rejoices in a falling birth-rate. However, domestic teaching in schools has now passed beyond the range of controversy, and I, for one, am very glad that it is so; it is the method of argument of which I complain.

And it is not only in the newspaper press that this confusion reigns. Let us take a still undecided and more topical case. Acute discussion is now proceeding as to the need for more

[1] Winch, *Problems in Education*, chap. i., 1900.

manual training in elementary schools. A large party of objectors say that the intention of its promoters is to keep the children of the poor in their places, that is, in the workshop. The argument is a little confused, because they are not there now; but we know what is meant. Its promoters say that their views are wholly educational. Some assert that the brain, whether of the prospective labourer, artisan, litterateur, or statesman, is a temple not made without hands —a profound truth. Others go further and assert that motor work "develops brain-centres as nothing else does"—meaning "better than any other form of mental work". 'Brain centres' is a little vague; it would be better to specify which; but the ideal is clear enough. Obviously, on this view, we ought all to acquire some proficiency in hand work. The difficulties begin to arise when one asks for the facts on which this ideal is supposed to be based. One finds, if one asks for evidence which will stand psychological and statistical criticism, that one is at once set down as an opponent of manual training.

And when we turn to the psychological (?) reasons given for the study of languages, we get confusion even worse confounded. Ideals and facts are hopelessly jumbled. Prof. Thorndike, in his *Educational Psychology*, has pilloried, once for all let us hope, many instances of such confusions of thought. One writer quoted says that the study of foreign languages "fibres the mind". If you denied this, he would doubtless say that you preferred a mind that was not fibred; but, perhaps, at this point, the absurdity of his own statement might strike him. Yes, that is American, but we can match it on our side. A recent Scotch Professor of Education has improved even on this. A certain school exercise, he said, "paralysed the mental powers and granulated the fibres of the brain". This seemed, indeed, a striking contribution to the correlation of mind and body. There was no evidence for it, but the teacher who disliked the exercise would be glad to learn, on a Professor's authority, that it did something definitely unpleasant to his brain. Mr. M. W. Keatinge, in a paper recently read to the British Psychological Society, has added to this list of confusions a few choice specimens from English orators and publicists. Everywhere it appears that men are disputing on questions of ideal and jumbling them up with questions of fact. What hope then is there of a common basis for educational theory, when the educational world is thus arrayed in hostile camps, in which ideal opposes ideal and facts are the very sport of hope?

And even supposing, as indeed is the case, that some agree-

ment is being reached as to what subjects shall be taught in schools, we still have the question before us, How much of each? And the old debates break out anew. As a very modern instance—let me recall how much I was impressed in American High Schools by the veiled antagonism between the biological and physical departments of science. Greek has largely gone, Latin is going; science has won its victory, but the conquerors are quarrelling among themselves. Humanism versus Naturalism is a perennial dispute, and it breaks forth anew within the ranks of science itself.

Do I suppose, then, that, one day, men will all have the same ideals? Expressly, I do not. That is not even true of China—our object-lesson of a stationary state. Nor do I think it will ever be so, even in the last feeble falterings of a nation tottering downwards to extinction. How then, having different ideals, can we hope for a science of education? Is it even the proper task for the educationist to try to make our ideals for us? Or should he content himself with telling us, if we ask him—which we do not always do—which are the best methods by which to achieve our ends? Is the science of education to be nothing more than a basis for an improved school method?

At this point I shall ask my reader's patience, because I shall set out by admitting the great strength of the case of those who answer the last question in the affirmative. We must admit that our ideals of education largely depend upon our ideals of life. And these are not primarily determined by the educationist; they are determined for us: the journalist, the politician, the novelist, the preacher, the poet, the moralist and the philosopher, in descending order of magnitude, leave but little influence for the educationist. Perhaps, as this is a Journal of Philosophy, a few words ought to be said about the position of the philosopher—at the bottom of the list. I believe that Philosophy will shake off its apparent indifference to the transitory and practical—it is even now doing so; and I am hoping to see some day the big generalisations which affect educational hopes and fears taught to teachers by those who are philosophers. This article, however, is not a discussion of the relation between education and philosophy. To those who are keen on that question, I would commend Mr. Dumville's article on the subject in the *Proceedings of the Aristotelian Society*, 1906. Of one thing I feel fairly sure—that no one competently trained in modern philosophical schools could teach the absurdities now so often current under the guise of educational theories. Do I hope for agreement? No, but I do hope for a rational survey of

opposed systems, whichever (if one must be chosen) is finally espoused by the student and teacher. It was not, however, to reach agreement through philosophy that I set out in this paper. Those of us who may be philosophers must agree more closely than we do at present in the precision of our differences.

At this point an opponent might urge, "But ideals, you say, are largely beyond the educationist. Is it not, therefore, his duty to confine himself to methods; does not your own argument show it to be so?"

II. Quantitative Research and School Method.

My first contention was that we should, if we wished for progress in educational theory, most carefully separate our ideals from our facts. This would, I take it, enable even those who disagreed fundamentally as to ideals to work together in researches in educational administration and psychology. They might even work together in researches on school method, if they would admit in common that a certain knowledge ought to be acquired and a certain human power, if possible, increased.

And if they work together in actual problems of school method, they will very soon come to agreement as to the need for some system of measurement. How shall a child be taught to read, for example? Brown says he has always taught by means of alphabetic spelling; Jones, by phonics; Robinson, by a 'word method'. When they get beyond the stage of asserting that certain pupils, taught each by their own methods, have achieved eminence in literature and have been remarkably fine readers, they inevitably settle down, if they go on from discussion to investigation, to a clearly marked quantitative method, with units agreed on by all parties. When we get keen this will be done, even in England. We have most careful measurements in cricket, Marathon races, and other pursuits of real importance to men; and we shall get them in educational methods. Quantification here would, even now, be readily admitted as vitally necessary.

But are the methods of experimental research of value when we pass from little details of method to the great principles which govern our educational theory on a large scale? What have educational psychology and quantitative research to do with these things?

III. Quantitative Research and Educational Theories.

My first contention was, as I have said, that we should separate ideal from fact and realise clearly which was which. I now ask that we may put them together again, and I need hardly say to a psychological audience that our new unity will be very unlike our old one. But will the facts that we already have, or may accumulate, make any difference to our ideals? I think they will. And for evidence I turn to the argument of those who are not experimentalists in quantitative work and who would not necessarily accept its aid.

One writer, already alluded to, believes that we should study foreign languages. Why? Probably because he likes them; but that is not how he puts it to himself. He bases his ideal upon a fact or an alleged fact. "They fibre the mind," he says. Now we are in a position with which Science can deal. We can experiment and see if they fibre the mind. If they do not, he must give up his ideal or be content to hold it divorced from the fact on which he sought to base it. Of course, I am assuming that he knows what he means, and can tell us how to recognise it when we find it.

Another writer, who, in a recent volume of *Psychology*, has severely admonished academic thinkers, wishes to have parents taught how to rear their children. He gives a fact to justify his ideal. This is the fact! "Human intelligence is a limitless thing; it can learn everything, but it has everything to learn." Comment is superfluous. If this be true, quantitative investigation is largely out of court. But my point just now is that the ideal is based on a certain view as to the constitution of the human mind.

Take one more illustration. "Women ought to be educated like men," it is sometimes said, "especially in mathematics." The alleged fact on which this ideal is usually based is that they are naturally quite as well endowed: and we are reminded that there was once a female senior wrangler. My reader can easily multiply examples of this kind for himself. He may think the instances trivial and such as justify the view that experimental researches into fact may be of little value in directing us rightly on those broader issues upon which the main principles of educational theory depend. To some of these, I now address myself, with no hope that I can present final views, but to see, if possible, whether quantitative determinations of fact may not help us there also. And first I will endeavour to deal with a very fundamental question; namely, how far, if at all, can we really teach any one?

IV. How far can We Teach at all?

What then, if my general contention is sound, should be our first duty as educational theorists? Obviously, as it seems to me, to cease our worship at the shrines of those early educationists who, however gifted naturally, had little science behind even their most brilliant guesses. The scientific Theory of Education, we say, has yet to be constructed. And the philosophy of it is to be found in no independent and mysterious temple, presided over by a Professor of Education; but in the metaphysic, logic and ethic of to-day, guided by the knowledge of our own times.

And this is the more necessary since new problems have arisen since the days when educational theory was merely the hotly emotionalised expression of the opinions of an individual. Everything was clear, absolute, unquantified, like the ordinances of a despot, and not a particularly enlightened one. The great problem of all problems to the educationist was not raised in those days.

As has been recently pointed out in the case of Politics, an artificial simplification slumped us all together in an unreal equality; we were all reasonable creatures who worked principally for economic gain and, in our actions as voters or representatives, were guided by an enlightened self-interest, about which we knew enough to choose the right path, and willed strongly enough to pursue it. We were all 'men and brothers'—in theory, I mean; and environment, duly adjusted, would, it was thought, make us all so much alike before long that even the earthly kingdom of heaven that was hoped for threatened to become monotonous.[1]

In Education the same peculiarities were present. If the ideal was informational, it was held that you could get all you wanted into everybody, if you only caught them young enough. If the ideal was developmental, it was held that, under conditions of due freedom, every one would develop into a perfect specimen consistent with the idea of his species. The horse was much less a particular animal than a metaphysical reality (in the Platonic sense) of what a horse ought to be, what it indeed must be if the name 'horse' were to be properly applicable. In the same way 'man' was no mere normal among varying existences, but an ideal thing; and it was for this ideal that our theory was framed. The Educationist, therefore, need have no fear in either case; indeed no one doubted, though many feared, that, by environmental arrange-

[1] *Cf.* Graham Wallas, *Human Nature in Politics, passim.*

ments, among which education was the chief, one could produce a practical equality and uniformity among the members of a nation, or even among members of different races.[1]

But, with the rise of Darwinian evolution, all this was changed. And now there is no serious contribution to educational philosophy in which, in one form or another, the question is not raised—How far can we teach at all? How far, if at all, can changes of any kind be made by education and training? Popular educated opinion, disgusted by the disappointment of its former extravagant hopes about compulsory general education, has executed a *volte face*, and believes now that, apart from some sort of vocational preparation, there is very little advantage to a nation in compulsory education and, indeed, very little hope of any general or wide-spreading culture. Thus disappointment, class-bias, and the Darwinian philosophy have tended to produce a strong reaction against perfectionist systems; and we have the curious spectacle provided for the cynic that, in these days, when we are spending the largest sums ever spent on general education, there is, probably, even among schoolmasters themselves, less belief in its efficacy than ever before. I do not hope to deal with so intangible a thing as general opinion; but there are certain definitely grouped views to which consideration must be paid, for to them, more or less definite expression has been vouchsafed.

To the Froebel, Rousseau, Spencer school, we need for the present to give little space. Their views, logically pressed, lead us to *laissez faire* in educational method, and the doctrine is as dead in Education as it is in Politics. It was easy enough to suppose that liberty would bring all requisite blessings when men were more or less in chains; but Liberty is here, and lo! the millennium is still far away.

Their lineal successors, indeed, aim at an artificial reproduction of that stern and practical process by which, and by which alone, they hold that man has evolved from barbarism to some sort of unsatisfactory civilisation, and which they wish the child to pass through again, with certain moral differences. Spencer, one might think for a moment, advocated something like this, but the resemblance is largely illusory; he advocated Science; the modern recapitulationists advocate Art.[2]

[1] It appears, by the way, from some recent experiments, not yet published, of Prof. Thorndike, and, may I add, from some of my own, that equal educational facilities may result in the emphasis of natural differences, not in their suppression.

[2] By Art I mean the doing of things as opposed to the knowledge of

Meanwhile Herbartians conceive that they will find a more deadly foe than the Froebelian in modern biometric methods; and they assert that conclusions based on statistical summaries about such things as seeds and the antennæ of insects are straightway and illegitimately accepted as applicable to man, and hence to have a bearing on educational theory.

Moderate reviewers tend to discount this alleged antagonism and say that, in any case, teachers will do their best with the material in hand, even if they should learn that they cannot effect such great changes as was hoped in former times. But it would, I think, be rightly urged that teachers cannot, and ought not to be indifferent to the facts ascertained by biometric measurements: they are indeed, as is shown by the recent memorial of the Council of the Teachers' Guild of Great Britain and Ireland, not only not indifferent, but keen that biometric mental measurements should be made. Only, they ask, very reasonably, that we shall draw our educational inferences directly from facts of race and child psychology and not from supposed analogical resemblances between man and the lower animals. But in the absence of any complete body of reliable researches directly bearing on these issues, we must at present argue on such evidence as we have.

There can be little doubt that both the earlier and the later Darwinians tend to the opinion that the possibilities of educational environment are very limited; and such work is quoted as that of the *Jukes Family*—a magnificent monograph which still stands almost unique—Galton's work on the inheritance of faculty, and Thorndike's *Twins*, all tending to show the great importance of natural powers as compared with the influence of varying environments. Against this there is very little at present except the hopes of optimists. The reports of reform institutions, invariably laudatory, are, of course, vitiated by the fact that the persons making them are usually responsible for the institutions, and that their own economic futures are bound up with the creation and operation of a belief in the ameliorative results of the agencies in question.

Among educational writers, the Herbartians fully realise the gravity of the issues involved; and educational writers who are anti-Herbartian seem also to feel its importance. Some

things: of course the doing will involve a knowing as part of its own successful development. I do not mean by Art the "coloured design" (!) which, quaintly enough, the word Art has come to mean in elementary education.

of them, too, in discussing this problem, tend to talk as if an "idea" were somehow independent of the nature of its recipient and, in true Herbartian fashion, worked its way forward, dragging along the person who had been inoculated with it, will he nill he. We have long ceased to believe, rightly or wrongly, that a man's sensational life and his manual dexterities are very seriously dependent on his ordinary educational environment;[1] but an "idea" seems something looser, something more modifiable, something still in more plastic process of differentiation and integration, to use Mr. Spencer's phrase, which so aptly applies to both the biological and psychological worlds.

There are, of course, cases duly attested by the persons themselves in which a chance occurrence—a book, a sight, a suggestive word by a teacher—has changed a man's whole life and dedicated him, he thinks, to a long career of efficient service. One American writer defends the elective system of studies on the ground that, in browsing around, the pupil may hit upon something which is, for him, the most suggestive educational *milieu*. But the American, though he belongs to a people who once declared that men were created free and equal, is probably somewhat truer to fact than our writers who talk of "ideas" creating vocation: he looks on the individual as largely predetermined and the electives as a successive presentation of possible pabula, one of which may happen to be the food of a dominant power.

Yes, but how far predetermined, how far can we teach at all? Must we just confine ourselves to standing by with appropriate stimulus, dropping it, if it does not arouse spontaneous attention, and searching, by means of ancestral records, for what is likely to do so? Must we develop the child's whole nature—a Froebelian dictum? And if we ought, how can we tell beforehand what it is likely to be? Are we to be scared or cheered by this hereditary determinant which, to some writers, stands like a spectre barring our path and casting over our brightest hopes the sickly hue of the sepulchre?

I can only suggest, as before, quantitative determinations under exactly known conditions. We know we can make changes in mental possessions. Can we in mental powers? And if we can, are these changes in any way permanent? And are they in any way transferable to other activities?

[1] I do not wish to be understood as asserting that these functions could not be modified by educational environment.

V. Are Acquired Powers Inherited?

We will suppose that the question as to human teachability has been settled, more or less adequately; but we are not even then at the end of our biological difficulties. Many of us remember when the biological world assumed, or rather, held without question, the principles of Lamarckian evolution. Society could, it was held, dispose of its bad stock by catching them young, teaching them vigorously, and then setting them free to become the parents of children who would, it was thought, start *ab initio* with a better mental endowment due to the education of their parents. In brief formula, acquired traits were believed to be inherited. The growth of what is known as Weismannism was the first great check to the general attitude of evolutionary optimism. Each generation would have to stand, as it were, on its own bottom. Popular education would then become a Sisyphean task; and if Mill, with his optimistic beliefs, could sigh out that something might be done if only the everlasting flood of children could be stopped, much more disheartened would the modern meliorist become who found himself compelled to accept this new doctrine. To begin again at the beginning with every new generation, a beginning which, in every successive generation, was just as low down as before in the evolutionary scale, was a task which was felt to be overwhelming. This was the spectre of heredity in its most formidable aspect.

Meanwhile, the progress of biological knowledge and the recognition of the great complexity of the problem have produced an attitude of impatience among experts towards those who still express the problem in their minds in the old way. They are told, as if they were metaphysicians of an opposing school, that there is no problem there at all. Those of us who followed the discussion in *Nature* last winter were, I believe, much more impressed by this impatience of attitude than by the arguments that were adduced, cogent as many of them were. Of course, if there is no problem, optimistic educationists are showing unnecessary alarm; but what is really meant is that the case is closed against the inheritance of acquired characters. At the risk of being thought unduly favourable to statistical summarising, I again suggest a quantitative experimental treatment of the problem, however expressed, applied directly to man himself. But let us see first if the problem is solved by being stated in other ways, as has been suggested. I quote from the discussion in *Nature*. "In man, the main difference between the infant and the adult is due to use acquirements." "Some powers develop

by nutrition, others by use." The hair and sexual organs are given as instances of the first group, muscle and brain as instances of the second. "Memory, the power of learning, develops under the stimulus of nutriment, but intelligence and reason develop under the stimulus of use."

It is always interesting to note how very certain a biologist can be on psychological problems, and what definite and clear-cut views he can possess. A glance at the work done on the subject of memory would show, however, that such a startling contrast between what is called 'intelligence' (a word tabooed by expert psychologists) and memory is not in fact tenable. Still, careful quantitative work *might* show that this view, however crudely expressed, was not altogether unsound. Doubtless, some of our powers come into being without exercise by us, though one might perhaps suppose that even sexual powers owe something to use. The cause of the development of others must be sought for, possibly, in preceding stages of evolution. Again, I suggest that without quantification we are really in the dark.

Let us seek, however, a more careful statement of those views which are, perhaps, inadequately expressed in the preceding quotations. I still quote from the controversy in *Nature*.

"A principal phase of the evolution of the higher animals is the evolution of a power of responding by growth to stimuli." "The *characters* which thus *arise* are in some species of great magnitude" (italics mine). "They are just as much a part of 'normal' development as the inborn traits." It is further pointed out that variation renders a species adaptable; but the power of developing under the stimulus of experience confers adaptability on the individual as well. The official view of *Nature*, so far as it may be supposed to possess one, is that this way of stating the problem is an improvement on the "chestnut-old one" which asserts that acquired characters are inherited as well as innate ones—a statement that is meaningless, because all characters are both acquired and innate.

It is asserted that the Lamarckians have made two assumptions:—

1. That use causes development in all characters.
2. That parental acquirements affect the germ cells so that traits acquired by use are reproduced in offspring not under the stimulus of use but by nutrition.

As against these assumptions, it is urged that some human structures and functions are plainly incapable of developing under the stimulus of use, *e.g.*, the hair, the teeth, the ex-

ternal ear and memory; though memory is now said to increase under the stimulus of use in the higher animals (other than man).

Another presentation on the same side runs as follows: "Acquirements arise for precisely the same reason that all inborn characters arise—because evolution has created the power of responding in quite definite ways to quite definite external stimuli; clearly then they are innate in precisely the same sense as inborn characteristics". We have further a reference to "man's instincts which impel him to make precisely the physical and mental acquirements which bring him into harmony with his own individual environment". This will be startling news to those who have worked experimentally on questions of instinct, and certainly seems to render deliberate education a somewhat redundant, if not destructive, affair; and we may note that the non-specialised plasticity desired by educationists, and granted above, is now denied us.

Finally, one protagonist accuses another of being in as unhappy a position as those investigators "who, before defining what they mean by inheritable, spend years of labour in ascertaining what is inherited". The last argument savours rather of the metaphysician's closet than of the laboratory, and doubtless in this as in other matters of science, accuracy of definition and experimental work will proceed side by side; but the chief interest attaching to the whole discussion lies in the refusal to admit any validity to the views of the Lamarckians and Spencerians; or indeed to admit the existence of a problem at all: the case is closed against use-inheritance.

I make no claim to competence to deal with biological questions other than those which are psychological; but may not educationists and psychologists have something to say on the question? Its enormous importance to educational theory prompts me to put the matter as it appears to educationists: As we conceive the mental development of children, we believe that each one sets out with certain potentialities of development. Appropriate stimuli will develop these, memory among others. But what we want to know is, assuming that by training we had succeeded in producing in certain children a very great development, say, in memory or imagination, whether these persons as parents would beget children in whom the faculty trained would, with equal training, be developed to a greater extent than with children, otherwise equal, of parents who had not in youth been trained in this way. Of course, as *Nature* says, we cannot cause the acquisition of power for which there is no natural aptitude. That was said

long ago in a review in this Journal in reply to some rather dogmatic arguments *against* use-inheritance. The question of Nature versus Nurture (whether nutritive or stimulant) is a quantitative one, and the question of use-inheritance is a quantitative one, too. It may be that experimental education, whether of man or the lower animals, will be the *first* science to provide us with an answer which both parties to the controversy will accept.[1]

For the present, however, the educational theorist, it seems to me, is bound to accept the balance of biologic opinion and make his educational deductions from a basis of the non-inheritance of acquired characters. But is this spectre so very appalling? If it snatches from us our hope of an indefinite increase of human faculty by the training of successive generations, each of which may be, by virtue of greater inherited aptitude, brought still nearer to perfection, does it not at the same time relieve us somewhat from the degeneration spectre? For if Weismannism be true, we can start *ab initio* with every child; the wizened and feeble offspring of the slum will not suffer because of the unhealthy environment of his parents; that does not affect the 'germ cells'; and, provided his stock is sound, he has, under due environment, an equal chance with other children. Sir E. R. Lancaster says, "There is no evidence that privation and injurious conditions cause deterioration of the stock in animals or plants. They may kill out a stock at once but they do not alter it," which is, of course, quite unadulterated Weismannism.[2]

With frank acceptance then of all modern methods of research, nay, more, in the fervent hope that we are only at 'cock-crow and the morning star' in our applications of quantitative determinations under exact conditions, I claim on this second count also that there is a place for, and a hope of, some melioration through education. But even if there is no transfer of acquired powers by heredity, the following

[1] As this article is going through the press, I see that Dr. Robert M. Yerkes of Harvard relates an experiment on these lines in his book *The Dancing Mouse*. The biologist doubtless finds it hard to conceive how 'somatic' cells can influence 'germ' cells, and we should certainly have hypothetical anatomical atoms—physiological units, gemmules, ids, determinants *et id omne genus* invented to account for it if the belief in such influence should again become dominant. Some of these things, I am aware, are at present in the service of the opposing theory. And doubtless, also, these conceptions will yield the usual crop of internal contradictions, which will keep biologists busy. To the educationist, however, the question merely is, Is there such an influence, and how much?

[2] Quoted in *The Nation*, Feb. 1, 1908.

question may be asked, Is there not another way toward indefinite educational progress by means of the increasing power of the appliances and stored results of civilisation?

VI. The Secular Continuity of Knowledge.

Perhaps the third great question which affects the educational theorist is what may be called the secular continuity of knowledge and civilisation. Mr. Balfour, who is not usually unduly optimistic, puts the question thus, "Does one civilisation start with the advantage of the ground which its predecessor has won?" An able reviewer of Mr. Balfour's pamphlet thinks that the only guarantee of the maintenance of civilisation is the scientific spirit applied to human affairs, inspired by a love of liberty and humanity. He answers our question affirmatively; but let us come to a little closer quarters with the problem.

We have no guarantee, so far, against degeneracy of stock except in so far as this has been thought to be caused by bad environment. Whether there is any hope of improvement by the unfettered and unconsidered action of the evolutionary process in itself is a question which to-day I leave on one side. Suppose we have neither improvement nor degeneration in stock, does it appear that civilisation can become cumulative? I limit my consideration mainly to questions of knowledge and education, not because I deem them to be exceptional, but because I have little competence to deal with the question in any other aspect.

A very brief glance at a few historical object lessons may help my reader and myself to grasp this question in a more concrete way. Greece fell, but Grecian culture triumphed; only when, however, its recipients themselves had changed, and changed before they submitted themselves to it. The Protestant persecutions in France, by exterminating or expatriating those sections of the population most liberal in thought and leaving its maintenance by selective breeding to the upholders of clerical authority, would, one supposes, on the ordinary doctrine of natural selection, have given us an eighteenth century France overwhelmingly Papal, or at least averse to individual inquiry into truth. The exact contrary has proved to be the case. Similarly, responsible and competent historians have given up, on the one hand, the ascription of the French Revolution to the philosophers, on the other, to the terrible destitution of the French peasant.[1] It was due, it is now supposed, to a growing liberality of

[1] See *The Cambridge Modern History*, vol. viii. *passim*.

thought in all classes and the assertiveness, newly grown, of the middle classes. The Moors of Spain were a great and cultivated people, but their civilisation was blotted out by the ruder and more vigorous forces of Christian Castile, and very little of their art or knowledge survives. So perhaps we might go on, quoting case after case of general historical precedent. But it will be more to my purpose as an educationist to quote from the development of knowledge and opinion than to try to draw conclusions from such a tangled skein as the actual complexity of whole civilisations. Let us together pass in review such a book as Lecky's *History of Witchcraft*. It strikes even the historian himself with repeated astonishment that the intellectual output in favour of a belief in witchcraft was enormous in comparison with the work denying its existence. The former had, as we can now see it would have had in times ignorant of psychology, the strongest arguments on its side. But the disbelief in witchcraft, by no means yet complete, is now decidedly dominant. Or let us read carefully such a work as Beazley's *Dawn of Modern Geography*. Perhaps I may be permitted to quote a few telling passages.

"We do not find Europeans of the earlier Middle Ages following in the steps of Ptolemy—correcting his miscalculations, or dominated by his theories. Their geography is turned off upon a different path, and occupied with very different problems; and it is not the lineal descendant of Greek thought in the same way as Arabic metaphysic is the lineal descendant of Aristotle. The great names of ancient science have a vague, but not a very exact or penetrating, influence upon Christian geography and exploration before the fourteenth century."

"In any account, therefore, of mediæval travel, at least before the Crusades, it may be safe to treat the higher classical geography as a deposit rarely used, a legacy generally forgotten, though realised by some."

"Geographical *theory* or science in Christendom, between the age of Mohammed and that of the Vikings, is in a state scarcely less rudimentary than travel."

"Much of the advance made by the pagan world is now abandoned; part of the knowledge once gained has been forgotten, part seems to lie in a sort of limbo on this side of Lethe, not altogether out of sight, but, as it were, out of touch of the new time, uncared for, unattended to. The word seems reversed—'Let us *not* now remember our fathers, and the actions of famous men'. As Bacon said in another connexion, everything of value seemed to sink, and only the

light and worthless rubbish came floating on down the stream of time. Ptolemy and Strabo, Herodotus and Hipparchus, passed almost wholly away from Christian memory, and the only works of the pagan period which held much attention were compilations of marvels such as those of Solinus, or the lists of place-names which Orosius, Guido, or the anonymous geographer of Ravenna put under contribution."

And in a recent review in *Nature*, the critic of a book on Mathematical Teaching, which, adopting the recapitulatory theory of teaching, speaks of the inter-racial development of the science as if it were linear and continuous, reminds the writer that his speculation is not in accord with historical fact.

It certainly appears that, unless nations, or races, or individuals have evolved into a mental condition approximately like that of those from whom they are to receive knowledge or culture, it is quite useless even for Minerva to land on their shores or offer them instruction: she would be excluded as an alien. (Japan's absorption of Western knowledge is apparently in striking antagonism to my theory—I do not know enough of the internal evolution of Japan prior to this absorption to argue about the matter; but in any case I must, of course, admit changes of extreme rapidity apparently due to the imposition of knowledge from without. It remains to be seen how far she has adopted our thought as well as our machinery.) And we speak of the dominance of Greek and Latin culture in modern Europe; but do the great majority or even a passable minority of the English boys, who spend their time in failing to learn Latin and Greek at our great public schools, really absorb Greek and Latin culture, or even a due measure of the spirit of its literature.

At this stage I can imagine that my reader, who was at first not quite sure whether I was trying to show my mental agility by starting paradoxes or was merely muddle-headed, has decided that I am only platitudinising. But I am going to try to show that that at least is not the case, whatever may be said as to the other possibilities.

Read a popular history of scientific discovery, or even one on the history of philosophy. How often do we meet paragraphs like the following! A, in such a country, did so-and-so. This was the inspiration of B, who followed it up with so-and-so, and this in turn induced C in another hemisphere to advance a further step. The assumption throughout is that, if A, at any time, presents to B, at any time, a piece of rationalised knowledge, B can learn it; and, indeed, that this

is the principal if not the sole method by which knowledge comes and grows in the world. We need, I suggest, exact evidence that C was influenced by B, and B by A, before we paint these pleasing pictures of the educational continuity of knowledge. And if we could get a reliable history of the mental process of scientific discovery, that notion would, I think, be directly controverted. Again, those of us interested in folk-lore and children's tales know how very like they often are and have been among peoples who have had no geographical contact intellectually. Enormous ingenuity has been spent on trying to show how a story got from one nation where it was first current to another nation where it was current later. But perhaps no transfer of this sort was needed at all; corresponding stories might be invented at corresponding stages in evolutional ascent. The influence from without might probably quicken things a little; that is all. The missionary who argued for the scientific accuracy of the Hebrew Genesis, because he found a story of a world-flood among his savages, was, of course, not for one moment conceding the possibility of the genesis of folk-lore which I suggest.

But grant all this, and how is educational theory affected? Am I not really too much in the clouds? I will try to show practical bearings. If we accept the view I am tentatively putting forward, we shall lose much of our present confidence in the external appliances of education. We may have libraries galore, instruments and apparatus *ad infinitum*, museums stored with treasures from every age and every clime. Shoals of visitors may admire, open-mouthed and often empty-headed, our vast and expensive provisions for educational progress, just as people now admire the material embodiments of the grandeur that was Rome; but withal we may be a stupid people. Unless we continue to breed the men who can grasp and control these things in the highest human interests, they will of themselves serve but as accumulated lumber, or pass wholly from the service of God to the service of tables, like the triumphal edifices of the past to the degenerates in Mr. Wells' *Time Machine*.

It does, therefore, seem to me that there is much justification for the view, now gaining some actual currency in educational theory, that we can have no satisfactory education, unless we set ourselves definitely to reproduce artificially the *milieu* in which the human race struggled towards a solution of its problems of life and thought in earlier days.

VII. Does the Child Produce in Replica the Evolution of the Race?

Doubtless many causes have contributed to produce an affirmative belief: but among them has certainly been a general dissatisfaction with the results of an educational system which has tacitly or overtly been founded on the opinion that B can always learn what A knows, provided A tells B often enough, and imposes penalties sufficiently severe if B has not learnt it. The last considerations then which I advance to-day have brief reference to these dicta: that the individual passes through the stages which the race has passed through, and that if one wants to teach effectively one must adopt this as a guiding principle.

If I were compelled to choose between the whole-hearted adoption of either opposing theory, namely, that we should commence the education of the young by means of the presentation of the completed products of a high civilisation, or, on the contrary, that we should try as far as we can to retrace with the young our own racial steps, I should have no hesitation whatever in accepting the latter. I can think of no finer clue on which to work. I can imagine little work more profitable than careful comparisons of primitive peoples, children, and civilised adults, with respect to their bodily and mental development. But I am going once more to put in my old plea. I am going to ask that all these things be quantitatively determined before we set about constructing a theory of education, *totus, teres, atque rotundus*, from what is rather a broad conception embracing the facts than a scientific summary of them. Is there and was there no evolution by atrophy? Has there never been any short circuiting in animal and racial progress? May not the principle of lapsed intermediaries apply to the race as well as to the individual? Not to multiply quotations, I will ask my readers to read the following from Haeckel.

"On account of a shortened process of Heredity, various ontogenetic intermediate forms, which *must* have existed phylogenetically, or in the ancestral lineage, have in the course of historic evolution gradually dropped out from these gaps."

"The term *Kenogenetic process* (or vitiation of the history of the germ) is applied to all such processes in the germ-history as are not to be explained by heredity from primæval parent-forms, but which have been acquired at a later time in *consequence of the adaptation of the germ*, or embryo form, to *special conditions of evolution*. These kenogenetic processes

are recent additions, which do not allow of direct inference as to the corresponding processes in the tribal history of the ancestral line, but which rather falsify and conceal the latter."

"The repetition is more incomplete, in proportion as the latter vitiated evolution (Kenogenesis) is introduced by changing adaptation."

Haeckel speaks of 'vitiated evolution'; he means vitiated theory; but, in any case, he wrote some time ago. What is the position to-day? Mr. Kellog[1] tells us there is a growing opinion among embryologists that "the recapitulation theory of Fritz Müller and Haeckel is chiefly conspicuous as a skeleton on which to hang innumerable exceptions," and that "Unfortunately it is exactly on that weakest of the three foundation pillars of descent, namely, the science of embryology with its Müllerian-Haeckelian recapitulation theory or biogenetic law, that the child-study pedagogues have builded".

What then is the practical upshot on this count? Just as before, that we must quantify our knowledge. The child does recapitulate. Yes, but just how much? The child does short-circuit? Yes, but just how much? Much will come without teaching. Yes, but how much? Something will be done by deliberate instruction and elucidation. Again, how much? Will a child, for example, learn more if he commences school at three years of age than at five? Will he walk sooner if he crawls first? Will he draw better with his hand by-and-by if he begins drawing at first with his arm? All such practical questions are not merely practical; they have a serious and far-reaching bearing upon biology and psychology as well as on the theory of education.

This then I ask and claim from educational theorists. Firstly, that we turn less to the teachers of the past and more to the thinkers of to-day; that we avail ourselves more freely of modern science and philosophy, which have already put out of court much that was formerly held as educationally axiomatic: secondly, that we cease to think of a philosophy of education apart from and independent of the general philosophy of our own times. Above all, that we quantify our knowledge. We wish to stimulate a child's interest; yes, but to how much and how far will spontaneous interest carry us? And how much further ought we to go? And at what cost? for we do not wish our schools to be factories for the production of mental fatigue on a large scale and we have begun to measure this fatigue so as to prevent it. But MIND is not the journal

[1] *Darwinism To-day*, 1907.

in which to consider the details of doctrine. It suffices if I have shown that, just as in the little problems of school method, so also in those vast general principles which are even cosmical in scope—we can make small advance in educational theory without ready and constant appeal to quantified fact.

In the day when that belief is accepted we shall find in England some adequate provision made for a systematic collection of the data on which our beliefs on these great questions ought to depend.

V.—DISCUSSIONS.

PROF. WATSON ON PERSONAL IDEALISM: A REPLY.

In a criticism which he has done me the honour to bestow, in a chapter of *The Philosophical Basis of Religion*, upon my article on *Personal Idealism*, Prof. Watson has misunderstood and misrepresented me in a way which I should have thought quite impossible. I think I shall best succeed in correcting these misrepresentations, and at the same time do something to meet his objections, not by writing an article or attempting a continuous argument but by citing and commenting on a few passages of his book.

1. "Let us put ourselves for a moment at the point of view of the Personal Idealist. All that I or any other being directly apprehends consists, as we must suppose, of ideas in my mind—ideas which, as unique and peculiar, cannot be present in any other mind, not even the mind of God, in the sense in which they are present to me. Now, if we are to take this doctrine strictly, as we have a right to do with any philosophical theory, is it not evident that by no possible process can any of us ever break through the charmed circle of his own separate individuality?" (p. 108).

Now in the first place, I have not said that all that I "directly apprehend" consists in "ideas in my own mind". Nor can I find in my article any statement which can reasonably be thus interpreted. But Prof. Watson will probably want to know whether I am prepared or not to accept the doctrine imputed to me. I should reply that there is a fatal ambiguity in the word "idea," in the word "directly," and in the word "apprehend". I may best perhaps exhibit the first ambiguity by recalling Mr. Bradley's familiar distinction between idea as a psychical event "in my head" and idea as "meaning". By this I do not mean that I adopt without qualification Mr. Bradley's theory of predication. It is enough that an "idea" in my mind may be looked upon either as a "psychical event," or to indicate something for which it stands in Reality. Now I certainly do contend that my idea considered as a psychical event exists in my mind and nowhere else: I do not conceive it thinkable or possible that God should experience, for instance, the identical pleasures and pains which I experience. Prof. Watson has himself pronounced it "perfectly true" that "the existence of the hunger in me may be known by others while

no one but myself can experience the feeling" (p. 119).[1] But supposing we turn from the "idea" considered as an event in my mind to an "idea" as it enters into knowledge, I have never suggested that an idea is *simply* an event in my mind. I recognise that in every judgment (which may be treated for the present purpose as an idea[2]) there is an objective reference. But this objective reference does not by itself carry me beyond my own experience. That objective reference exists no less in a judgment such as "I had a toothache," or even "I have a toothache," than in the judgment "Trees are green". Even here what I mean relates to a reality which is something other than the judgment itself considered as a momentary state of my consciousness: for I necessarily think of myself as something distinguishable from this or that momentary sensation. As the judgment is made immediately and is not an inference, it might perhaps be called a "direct apprehension," though "direct apprehension" does not seem to me a suitable word to apply to any judgment—even a "judgment of perception". But the question remains whether I can pronounce equally "immediate" judgments upon anything but my own mental states, past or present. Now for the moment we may put aside the question how far I may be said to make immediate judgments about things existing outside or independently of my own consciousness. There is a real difference, though I think not so great a difference as Prof. Watson supposes, between my Idealism and his as to the relation between the individual mind and the "external world" of things in space. But his argument for the moment is, I take it, that, upon the view that reality ultimately consists in the experiences of individual minds, I could not by any possibility get beyond *my own* individual mind, and attain a knowledge of other minds. That we actually do make judgments

[1] Perhaps it will be fairer to Prof. Watson and more satisfactory to the reader to quote the whole passage (Prof. Watson is here arguing against "the new Realism"). "Now, there can be no difficulty in dealing with such an instance as this. My feeling of hunger, it is said, is distinct from the actual condition of hunger; in other words, the feeling is a mode of my individual consciousness, the hunger is not. One reason given for this contention is, that the existence of the hunger in me may be known by others while no one but myself can experience the feeling. And of course this is perfectly true" (p. 120). It may be, of course, that Prof. Watson is here thinking only of other "finite" persons, and not of God or the Absolute. If so, of course my *argumentum ad hominem* falls to the ground. I can only say that to me it is as much a matter "of course" that God does not experience my hunger (however much He may know it) as it is to Prof. Watson that his neighbour does not experience Prof. Watson's hunger. By that I do not mean of course that the relation between God and any individual human soul is the same as the relation between two human souls. I shall return to this point hereafter.

[2] Prof. Watson may object to such a use of terms; but it is only on this assumption that I should admit in any sense whatever that the mind directly apprehends only its own ideas.

about the contents of other people's consciousness is common ground between us: but Prof. Watson will want to know whether I admit that we "directly apprehend" such contents. I have some difficulty in understanding what he means by "direct apprehension" in such a connexion. That the ordinary mind at the level of "common-sense" thought does not draw a distinction between the directness of the judgment "I have a toothache" and the judgment "he has a toothache," I do not of course deny. But does Prof. Watson himself contend that there really is no difference? Prof. Watson admits it to be true that "no one but myself can experience the feeling of hunger". Can he then contend that another person has as direct an apprehension of my hunger as he has of his own? Can he deny that it is by inference that he knows that I am hungry? If it is not by inference, how is it that we are liable to mistakes as to whether others are hungry, whereas we don't make such mistakes about our own hunger? I could wish that Prof. Watson had given an instance of what he means by a "direct apprehension" of another man's state of consciousness. But, whatever instance he gives, he would still, as it seems to me, have to admit that in *some cases* we have no direct apprehension of another's mental states, and yet do by inference attain to a knowledge of his states. What Prof. Watson can do in one case, the "personal idealist"—if I am to be taken as a representative of that position—can do in all.

2. Prof. Watson, after the passage quoted above, goes on, "What, then, can be meant by other objects or individuals, or by God? My knowledge of them must consist in the ideas which arise in me" (p. 108). Why so? The argument might hold, if I had admitted I cannot get an *indirect* apprehension or, as I should prefer to say, "judgment" or "knowledge" of those states: but I have not done so. And I am not bound to do so any more than he is. To say that my knowledge of God or other minds "consists in the idea[1] which arises" in me is true enough (could Prof. Watson himself deny it?), if by knowledge is meant the actual psychical state of the knowing mind: but it does not follow that the object that I know is simply the state of my own mind. Prof. Watson admits that the experience of hunger is in my mind only. Does it follow that, according to him either another's hunger is a state of my mind, or I cannot know another's hunger? No reason that he can give for inferring the existence of hunger in another is unavailable for me. Even if there be other things about other minds which are objects of "direct apprehension" (I don't in the least know to what kind of fact about other minds

[1] I here allow myself to adopt the phraseology which Prof. Watson attributes to me, but I have never used this language about "ideas". Prof. Watson appears to assume that because I have more respect for Berkeley than some other Idealists, I am bound to endorse all Berkeley's sensationalistic errors.

Prof. Watson would appeal), that would not alter the situation. What Prof. Watson can do in one case, the personal Idealist can do in others.

3. Prof. Watson continues: "Nor can it even be said that these ideas in some way correspond to objects lying beyond my mind, for Personal Idealism does not admit the existence of any objects other than ideas" (*ib.*). I have never anywhere said, implied, or thought that there exist no objects but ideas. On the contrary, my whole line of argument assumes a direct consciousness of the 'self' which is not (for me at least) a mere succession of ideas. But even if we substitute, "objects other than the self," the accusation is unfounded.

There is here again a fatal ambiguity in the word "object". I fully recognise the difference between an "object of thought" and an "idea" in the sense of a sensation; and if by "ideas" Prof. Watson means "sensations," I have never asserted that all our knowledge is of "ideas". I accept the distinction between a knowledge of objects and a mere consciousness of sensation as fully, and in much the same sense, as Kant or Green. But we are not now concerned with the question of *things*. To show that the Personal Idealist can get beyond his own mind, it is enough to show that he can know ideas in other people's minds. Now does the denial of the existence of any object but "ideas" prevent my knowing that another man has ideas, and what they are? The legitimacy of the inference I will discuss in a moment. But its impossibility is assuredly not proved by the argument now employed. The personal Idealist does not assert that all objects are ideas in *his own* mind. Why may not I have a knowledge of other people's ideas, which knowledge is also undeniably (from another point of view) an idea in my own mind? I quite recognise the difficulties of the "correspondence theory" of Truth. But the difficulties are as great, so long at least as we are dealing with the knowledge of mental states, from Prof. Watson's point of view as from mine. These difficulties it would take us too long to discuss now. At least "at a certain level of thought" I don't see that Prof. Watson could deny that, when he thinks of another's "hunger," the object of his thought is an 'idea' in another's mind to which another idea in his own mind, *i.e.* his knowledge of it, "corresponds". The difference between a mere sensation and a piece of knowledge is here irrelevant: both are ideas in the sense that they are psychical states. If, then, "the Personal Idealist does not admit the existence of any objects other than ideas" means "ideas in his own mind," the imputation is untrue; if it includes "ideas in other people's minds," it is true on the understanding that in "idea" is included every kind of psychical experience, and that to "ideas" we add "selves, spirits, or persons".

4. "If each individual is confined to his own ideas, by what

strange process is he led to imagine that there are other individuals besides himself? Is it not obvious that such a notion would never dawn upon him at all?" (*ib.*). As I have just explained, I have never said that "each individual is confined to his own ideas," if by that is meant that his judgments have no objective reference, or that he cannot know another's ideas, or that he cannot know himself as the permanent subject of his changing states. But I do certainly contend that it is by inference or analogy that the individual reaches the knowledge of other selves. I do not mean that psychologically the infant starts with a fully developed consciousness of the distinction between "self" and "not-self," or between "self and others". The distinction between 'self' and 'not-self,' between subject and object, gradually emerges in the development of consciousness, and so does the distinction between self and others. The inference is no doubt unconscious inference in the sense that the individual does not and often could not analyse the process. But it is unnecessary for our present purpose to go into these questions of Psychology. The real question is whether the reflecting individual can at the present moment justify his belief in the existence of other persons except by a process of inference from the facts of his own consciousness.

Prof. Watson calls such a process "strange". Why "strange"? If within my own experience I discover objects resembling my own organism, behaving in a similar way, responding to such and such stimuli in a similar way to my own organism, is it not a perfectly reasonable inference that there exists another consciousness similar to my own, which is *for itself* (with differences of detail which very often I do not and cannot fully know) what I am to myself? If I find another object of knowledge, shrinking, wriggling, crying out just as that object of knowledge which I call my organism does when I am in pain, why may not I infer that it is because there is another consciousness in pain similar (more or less) to my own? No difference of opinion as to the sense in which either organism exists independently of anybody's knowledge or anybody's sensation can affect the validity of this inference. In reply to this charge that Personal Idealism leads to Solipsism, I need do no more than refer to the chapter of Mr. Bradley's *Appearance and Reality* entitled "Solipsism". Mr. Bradley's analysis of the reasons for believing in other selves besides my own seems to be one that cannot be improved upon, and the reasons seem to me unanswerable. Mr. Bradley's system as a whole is not mine, but my Idealism is the same as his in so far as it admits—what seems to me the logical consequence of all Idealism—that "Reality is experience". There is not, so far as I have noticed, a single argument used in that chapter which I am precluded from using by anything that I have ever written. Nor do I see how Prof. Watson could himself use any other line of argument. Does he contend that the knowledge of other selves is

a priori? Then will he tell us what he knows about them *a priori?* Does he, apart from experience, know how many such selves there are, how far they resemble himself and how far they differ? If that is so, why does he not save the Government from the elaborate and expensive machinery of the census? If not, his knowledge of other selves seems to be very much in the same case as Kant's knowledge of things-in-themselves, and the usual argument against that theory can be used against Prof. Watson. If he does not know *what* they are, how can he tell even *that* they are?

5. The whole argument on page 109 proceeds upon the assumption that the Personal Idealist admits that an individual has "no knowledge of the ideas of any other individual". This I have already repudiated. On the following page (p. 110) I come to a still more definite misrepresentation. "God, however, as it is admitted, is the originator of the human and all other minds, though He is only the cause of those experiences which are not willed by other causes." I have never said this: the "only" is a gratuitous addition of Prof. Watson. The passage which Prof. Watson probably had in mind runs as follows: "By any one who admits the idea of volition into his own conception of God at all it will hardly be questioned that, if God wills He must will all, or at least (let us say for the present) everything that is not willed by some lesser will". Prof. Watson absolutely ignores the words "all, or at least". I was anxious to avoid in my short contribution to *Personal Idealism* entering upon the Free-will controversy at all, and therefore put aside the question of the relation of the divine Will to acts caused by a human will. I have since more fully explained myself in *The Theory of Good and Evil*, but even in *Personal Idealism* I carefully guarded myself against saying that acts willed by a human will are not also willed by God; and, since I explained that I did not postulate Free-will in the indeterminist sense but only "in the sense of the Determinist who believes in self-determination," *i.e.*, in the sense of Green or Dr. Caird, it ought to have been clear to any reader who knew the meaning of the terms used that I did not at all events exclude the possibility of *all* the experiences of each and every individual being willed by God. For the Determinist who believes in "self-determinism," and who regards the self as created, it is obvious that all the 'free' acts of the self must be in some "eminent" sense referred to God, since they proceed from the nature of the self which is caused to be what it is by God. I do not think I need here copy out the pages of *The Theory of Good or Evil*, in which I have there definitely rejected the Libertarian or Indeterminist position; but even in *Personal Idealism* I wrote explicitly: "We have found it necessary, moreover, to regard Him as causative—as causing those experiences of the other souls of which their own wills are not the cause, and (since no human will is ever the *whole* cause of anything) as co-operating in some sense with whatever causality is exercised by

human wills" (p. 380). Prof. Watson may regard this explanation as unsatisfactory, as it was admittedly inadequate, but it is inexcusable that he should ignore it, and insert an "only" where I used none.

6. "Is it really necessary to point out that, as all experiences of individuals, whether willed or not, belong solely (according to subjective idealism) to the individuals themselves, those experiences cannot without contradiction be ascribed to God by thinkers whose fundamental principle it is that nothing exists except what is experienced by individuals?" (p. 111).

There is an ambiguity here in "ascribed to God". I have denied that God "has" the same identical experiences as ourselves, just as Prof. Watson apparently, in the passage quoted above, admits that my hunger is in my own mind only. But I do not deny that God knows those experiences, and can therefore cause them. Why is there any "contradiction" in maintaining that God can cause hunger in another without feeling hunger Himself, just as I can cause hunger in another without being hungry myself? Of course I am aware that arguments may be used against such a view: but where is the contradiction? Again, there is an ambiguity about the statement that "all experiences of individuals . . . belong solely . . . to the individuals themselves". If "belong" to the individuals means "are their experiences" I admit (with Prof. Watson) that my hunger is not my neighbour's; but I do not deny that I can *know* another's hunger, and that when I and my neighbour are both hungry our hunger is in a sense the same hunger. My hunger is like another's, and I accept the doctrine, which I presume Prof. Watson would hardly deny, that likeness = identity + difference. There is an element in the two hungers which is the same, but this identical element is, taken by itself, a mere abstraction and not reality. The universal hunger only has real existence in the two consciousnesses. When from personal and very subjective feelings we turn to what are commonly called events or objects in the external world, the identity becomes greater, and the differences may often be such as may for practical purposes be ignored. I say that I and my neighbour look at the "same" house. When I come to analyse what the house means, I cannot deny that our concept of the house means that it produces (*inter alia*) red sensations in both of us and in all other men who are not colour-blind; but these two sets of feelings are not the same, unless I make abstraction of the fact that they are experienced by two different minds. I do not deny that my concepts or my judgments are often absolutely identical with those of my neighbour, but then concepts are abstractions when taken apart from their psychical context in individual minds. I have been taught by Mr. Bradley and others not to make the reality of the world consist in abstractions. Prof. Watson professes to be an Idealist. If so, he cannot claim reality for the object independently

of its relation to the subject. And I for one cannot help pressing the question "What subject?" I say "God and all men and higher animals and all other minds capable of seeing and knowing the house". If Prof. Watson chooses to regard all these minds as really one, that is an important difference between us; but I fail to see that I have any more difficulty than he has in accounting for my knowledge of other minds, and so of escaping Solipsism. His—as I cannot but think it ambiguous and hesitating—attitude on the question to what extent and in what sense objects in space exist independently of any mind's experience leaves us in exactly the same position as regards other consciousnesses, which neither of us regards as mere states of the mind which knows them.

7. "What, then," Prof. Watson continues (p. 111), "can possibly be meant by speaking of God as willing the 'world'? The 'world,' as we are told, is admittedly the 'object of God's thought,' *i.e.* it consists of His individual states of consciousness or experiences. To will these, however, is merely to will certain experiences of His own, and such experiences must be entirely distinct from the 'world' itself, *i.e.* from the experiences of other beings." Here I am really at a loss to understand what strange opinion it is that is attributed to me. Prof. Watson appears (1) to accuse me of making the world = merely the experience of God, and then (2) to assume that by the world I mean only the experience of other beings to the exclusion of God's experience. Now it is obvious that if I thought the world was simply the experiences of God, I should not admit that those experiences of God must be entirely distinct from the 'world' itself: for I should be identifying the two things. How Prof. Watson can suppose that I could possibly have held both the above positions, I am at a loss to imagine. Certainly he makes not the smallest attempt by quotation, or even by plausible inference, to convict me of having maintained so gross a contradiction.

As a matter of fact, each of these two inconsistent interpretations of the word "world" is a partial and one-sided interpretation of my meaning. I do hold (1) that the world is the experience of God: when I hold that God wills these experiences of His own, I am in exactly the same position as any orthodox Hegelian who uses the expression "God creates the objects of His own thought," except that I do not think that God's consciousness consists merely in the system of abstractions which make up "thought" as that term is commonly used by ordinary people. I hold that it includes feeling or an element analogous to feeling in us. Some Hegelians explain that this was fully admitted by Hegel, only that what ordinary people call feeling, he called "immediacy" or "immediate thought". With such Hegelians I have so far no quarrel. But I hold (2) that this world of Nature exists also in the consciousness of other minds, *i.e.* in the sense that those minds know partially what God knows perfectly and have experiences which have a certain

resemblance to those which we are bound to infer in God. These experiences of others I hold to be known to God, and also that He wills these experiences to be experienced by them. The only point at which I differ from at least some Hegelians is that (1) I emphasise this volitional aspect of Consciousness which they are more or less disposed to explain away into thinking (from a passage on p. 127, where he speaks of God as "creative reason," I infer that Prof. Watson does not adopt this attitude). (2) I do not hold that the experiences of other minds are at one and the same time also parts of the divine Consciousness, though they are known to the divine Consciousness.

8. "The self-contradictory character of this doctrine lies on the very surface of it. To begin with, it assumes that God, like other forms of being, is a separate individual, limited to His own experiences, and *incapable of exercising any influence upon other self-involved individuals*" (p. 110).

At this point Prof. Watson's misrepresentation of me reaches a climax. By what process of inference Prof. Watson has succeeded in persuading himself that the words italicised represent my opinion, I am at a loss to imagine. Not only have I not said one word to justify them, but I have said over and over again precisely the contrary. I have expressly (*Personal Idealism*, p. 380) spoken of God as "causing those experiences of the other souls of which their own wills are not the cause". I may here put aside the fact, which I have already pointed out, that I have expressly spoken of God as also in a sense the cause of those experiences which *are* due to their own wills. It is enough for my present purpose to insist that, in saying that God causes even the non-voluntary experiences, I have obviously admitted that He does "exercise an influence upon other individuals"—individuals whom I have never spoken of as "self-involved," whatever that may mean.

Here are a few other statements of mine: "The dependence upon God of the bodily organism carries with it the dependence upon Him also of the spirits to which such bodies are organic" (p. 381). I have spoken of the "contrast between an eternal or unoriginated mind and minds which are originated and *dependent*" (p. 381). I go on to say that as attempts to express the relation of God to other spirits "I have no objection to the fashionable phrases, 'partial communication to us of the divine thought,' 'partial reproductions of the divine consciousness,' 'limited modes of the universal self-consciousness,' 'emanations from the divine Mind,' and so on, provided that they are not used to evade the admission that the fact of such reproductions occurring must be regarded as no less due to the divine will than the first appearance and the gradual development of the bodily organism by which these reproductions are conditioned" (p. 382). How in the teeth of these declarations Prof. Watson can bring himself to accuse me of holding that God, having brought the spirits into existence, 'no

longer influences them,' or of believing in "a being who originates minds which are completely independent of their originator" (p. 112), or that individual minds are "hermetically-sealed" or the like, I am at a loss to conceive. I should have thought that my language in *Personal Idealism* was plain enough to leave no doubt in the mind of any candid reader that I regard every successive moment's existence and every successive experience of every spirit other than God as caused by God not less directly and completely than the first moment of such existence—that in old-fashioned theological language the act of conservation is essentially the same as that of creation.

But perhaps, as Prof. Watson finds a difficulty in recognising identity of doctrine when it is not expressed in the particular set of comfortable Mesopotamia-like phrases to which he is wedded, I had better express my confession of faith in his own words.

"While Constructive Idealism thus affirms the objective reality of God, it refuses to admit that He can be conceived as a separate and independent Being standing apart from the world and only acting externally upon it; on the contrary, it affirms that He is actually present in the world, and above all in the self-conscious life of man, while yet the infinite fulness of His being is not comprehended by us" (p. 432).

Or again:—

"Constructive Idealism maintains that not the most infinitesimal atom of matter or the faintest trace of feeling, not to speak of the fair creations of imaginative genius or the solid constructions of reflective thought, could possibly exist, were they not involved in the Infinite and supported by its continual presence and spiritual energy" (p. 437).

But for the use of the ambiguous and misleading word "Infinite" there is nothing in these passages to which I could not heartily and *ex animo* subscribe, and which does not represent what I have over and over again endeavoured to express in my own no doubt crude and unscientific way. The points of difference between us lie chiefly in these points:—

(1) I hold that, if it is once admitted that the object has no existence apart from *some* subject, we must be bold enough to accept the inference that the object is, in ultimate analysis, merely the experience of some subject or subjects, though we must make it plain that we do not mean by "experience" merely the mere sensations of the Sensationalist. My Idealism, in short, is the Idealism of such genuinely Idealistic writers as Lotze, Mr. Bradley, Prof. Ward, Prof. A. E. Taylor, Prof. McTaggart—not the "soft Idealism" of the school to which Prof. Watson belongs—a school which after refuting the Materialist by idealistic arguments meets the assaults of the Realist by unsaying all that he has said about the necessary reference to Consciousness involved in all the objects of our knowledge (except Spirits), and so leaving on the mind of an

outsider desirous of penetrating to its esoteric meaning much the same impression as the Athanasian Creed produces upon the mind of the average layman. For my own part I do not quite see the difference between saying that "Reality is experience" and saying (with Prof. Watson, p. 446) that "the physical world has no independent being, but is merely a phase in the life of mind"—at least not if Mind is to be held to imply (as for Prof. Watson it apparently does imply) consciousness.

(2) I do not regard the consciousness of each human individual as identical with the consciousness of God, or part of it, holding that the idea of a consciousness which forms part of another consciousness is essentially unintelligible and self-contradictory. To be caused by another consciousness, to be influenced by it, to love it and be loved by it, to hold communion with it—all these are not the same thing as to *be* another consciousness. Doubtless God and all the other consciousnesses constitute a Unity—if you like an Absolute. But I can see no reason to believe that this Unity is the particular kind of Unity which belongs to a self-conscious Being. Believing with Prof. Watson that God is a self-conscious Being, I refuse therefore to identify Him with the Whole, the Universe, or the Absolute. Consequently also He is not, in the natural and obvious sense of the word, "infinite," though I could easily find senses in which that word might intelligibly be applied to Him.

This was the gist of my contention. And this point is so little discussed by Prof. Watson that, even after reading his book, I cannot tell whether he does or does not identify himself with the position I attacked. If he is to be really consistent with his declaration that "no one but myself can experience the feeling" of hunger (p. 119), I should infer that he does not share it. If so, the supposed difference between us disappears. Only I fail to see how, if Prof. Watson were logically to think out what is implied in this position, he could avoid finding himself in much the same position as the object of his criticism, with all its difficulties real or imaginary, and being compelled to give up the doctrine that God "must be conceived as in some sense comprehending within Himself all that is" (p. 273).

(3) I may just allude to a third point of difference. I do not accept the doctrine that God is "out of time". In what Prof. Watson says about God having "successive ideas and experiences," "distinguishes Himself from all other consciousnesses" and the like (p. 110), he has most unfairly taken no account of the paragraph in which I expressly qualified any statement which might bear such an interpretation by suspending judgment upon the question of God's relation to time.

I do not intend to enter upon any further argument with Prof. Watson at the present moment. If I did so, I could do little but repeat the arguments which, as expressed in *Personal Idealism*,

Prof. Watson found so unconvincing or unintelligible, or by reproducing the fuller account of my views upon some points which is now to be found in *The Theory of Good or Evil*, in my contribution to *Contentio Veritatis* (which is referred to in a note in *Personal Idealism*), in an article upon "The Alleged Immanence of God" (*Contemporary Review*, June, 1907), and elsewhere. I am quite aware that all that I have written does not amount to a fully developed and articulated metaphysical system. I could only fully meet Prof. Watson's arguments by developing such a system. But I think I have said enough to show that his representation of my opinions amounts to a mere caricature. The only way in which I can account for his attributing such absurdities and contradictions to me is by supposing that he is really in earnest with the position to which some of his language seems to point, *i.e.*, that he gets his notions of what goes on in other people's minds entirely *a priori*. At all events, I feel that any further reply to a criticism based upon such misconceptions would be useless. I am not likely to underrate the value of the debt which all British Philosophy, and especially Oxford Philosophy, owes to the School to which Prof. Watson would be the first to admit that he belongs: but I am not disposed to think that Philosophy has simply stood still since the day when Prof. Watson was a student at Glasgow. And I hold also that the truth which that School teaches may often be expressed in language less ambiguous and more intelligible than the phrases which constitute its well-known shibboleth. I have read much—I may say most—of Prof. Watson's book with sympathy, agreement, and respect. If he had taken the trouble to understand me, he would probably have found that the difference between us is less than he supposes: for it is obvious to me that Prof. Watson's Idealism, unlike that of many who employ almost exactly the same phrases, is the Idealism of a genuine Theist. He is free therefore, or comparatively free, from many of the tendencies against which "Personal Idealism" is a protest. I do not doubt the perfect good faith of Prof. Watson's criticism. At the same time I cannot but remark that a little more pains would at least have avoided attributing to me opinions which I have in express words disclaimed, whatever may be said about the legitimacy of the inferences drawn by him from what I actually have maintained. The injury which such misrepresentations do to the criticised is something which no subsequent correction can undo. Misrepresentations of this kind stick. Prof. Watson's book will be read by people who do not read the back numbers of MIND, and they will believe that I have said and think what he attributes to me. If my opinions were so inconceivably absurd and so full of "obvious contradictions" as Prof. Watson supposes, they would hardly have been worthy of the criticism which he has bestowed upon them in a serious philosophical treatise.

The harm that is done by such distortions of a writer's position may be illustrated by the fact that my friend Prof. Mackenzie, in spite of his having, as I have reason gratefully to remember, read through my largest work in a very sympathetic spirit, pronounces in his review of Prof. Watson's book in MIND (October, 1908) that it is "thoroughly fair in its references to divergent positions". I trust that, after reading this paper, he may find reason for altering his opinion on this point, though the alteration will leave the merits of the greater part of the book just what they were before.

H. RASHDALL.

NOTE ON PLATO'S "VISION OF THE IDEAS".

The present brief communication makes no attempt to examine in detail all the positions taken up in Mr. Temple's striking article (Mind, N.S., 68, pp. 502-517). All that I wish to do is to point out that Mr. Temple's conception of the theory of εἴδη as originated by Plato in consequence of an "ecstatic vision" directly connected with a condition of sexual excitement reposes upon a string of assumptions which are all either certainly or probably mistaken, and is moreover at variance with the context of the very passages upon which it is directly based.

Mr. Temple's theory may fairly be said to require the following assumptions: (1) The doctrine of εἴδη as the objects of the highest kind of knowledge is an invention of Plato, and the speech of Diotima in the *Symposium* is a record of the experience which first suggested the invention; (2) the central feature of that experience was a sudden ecstatic rapture, comparable with the transition from intense darkness to dazzling illumination, and perhaps, if I understand Mr. Temple's allusions aright, attended by an actual hallucination of sudden illumination; (3) this ecstatic vision of Beauty was most probably the sole origin of that whole theory of εἴδη which is worked out in detail in the *Phædo* and *Republic;* (4) the ecstasy was the direct result of sexual excitement restrained from grosser expression, and so reflected inward upon itself. All these assumptions appear to me unwarranted, and all but the first demonstrably false. I will therefore make a few remarks upon each of them.

(1) We have, of course, no means of disproving that the experience described by Diotima is one peculiar and personal to Plato himself, but, on the other hand, we have no means of proving that it is. "Socrates" and Diotima may be mere mouth-pieces for Plato, but, equally, they may not. And if "Socrates" is made to talk as he does in the *Symposium* because Socrates actually did talk so on occasion, the theory that what is being described is the special personal experience of Plato falls to the ground. Now I should like to call attention to one point which seems to me to suggest at least a possibility that the speech of "Socrates" in the *Symposium* is much more of a reproduction of the manner of talk of the historical Socrates than is currently supposed. Careful study of the speech ascribed there to Diotima, particularly of pages 208-209, seems to me to make it clear that the conception of philosophical question and answer as the "maieutic art" of spiritual delivery is an inseparable part of the wider conception of the philosophic ἔρως, and cannot be properly understood except in the light of what the *Symposium* tells us of the impulse towards τόκος ἐν καλῷ.

(*Cf.* the constant recurrence in the pages referred to of the metaphor of the birth-pains of the soul that is in travail with an idea.) Now Plato's famous statement in the *Theætetus* that Socrates described himself as an adept in this spiritual midwifery is happily confirmed for us by a jest of Aristophanes in the *Clouds*, where the very imagery of the *Theætetus* and *Symposium* is employed (*Clouds*, 137, φροντίδ' ἐξήμβλωκας ἐξηνρημένην).[1] It would seem then that in his language about the "maieutic art" Plato is actually reproducing a turn of speech so common on the lips of the historical Socrates as to have been thought by Aristophanes worth parodying. Hence, it is at least not unlikely that the whole conception of ἔρως as giving the initial impulse towards philosophy, from which the "maieutic" metaphor is derived, may not be specially Platonic at all, but a part of Plato's inheritance from Socrates. In any case there are two considerations which seem to me to make strongly for such a view. The manifest care which Plato has taken in the *Symposium* to make Aristophanes and Agathon speak "in character" ought to suggest that he has probably done the same thing all through the dialogue if only we had the means of proving it, and that it is therefore unlikely that he should have put into the mouth of his "Socrates" a theory which is purely un-Socratic. (The case of a dialogue like the *Philebus* which carefully avoids anything like characterisation is, of course, entirely different.) Moreover the susceptibility of Socrates to the charm of the νέοι is one of the most familiar traits of his character, while we have no real evidence at all of any similar susceptibility on the part of Plato.

Of course this question about the history of the notion of a philosophical ἔρως is only part of the much wider question with whom and where did the doctrine of the εἴδη itself originate? It is an essential part of Mr. Temple's case that the whole doctrine originated in the mind of Plato, and that, consequently, any theories expressed in the dialogues which presuppose the belief in the εἴδη must be "un-Socratic". Here again, as it seems to me, the current conceptions are palpably erroneous. If we are to take Plato as meaning what he repeatedly says, the doctrine of the εἴδη is in no sense peculiar to his "Socrates". It is a conviction shared by "Socrates" with a large group of thinkers, constantly spoken of in the *Phædo* and *Republic* as "we," and including, among others, Simmias and Cebes, Theban disciples of the Pythagorean Philolaus. (Similarly in the *Timæus* it is Plato's real or imaginary Pythagorean astronomer who tells us that "we" are in the habit of talking about "fire-in-itself," and the rest of the εἴδη.) As regards the *Phædo* the case has been so admirably put by my colleague, Prof. Burnet, that I need do no more than refer my

[1] *Cf.* especially the language of *Theætetus*, 149 *d*, 150 *e*; the metaphor in ἀμβλίσκειν is too vivid, almost, for ordinary Attic diction, and it cannot be a mere coincidence that both Aristophanes and Plato should apply it to the associates of Socrates.

readers to his discussion (*Early Greek Philosophy*, pp. 354-356). To put the point quite briefly, what is specially characteristic of "Socrates" in that dialogue is not that he believes in the εἶδη,—so far he is on common ground with Simmias and Cebes, who are among the "we" to whom the theory is already quite well known,—but that he does not believe that the soul is the ἁρμονια of the body, as Simmias says "we" are accustomed to suppose.[1] The same representation occurs again in the *Republic*, and explains why no statement is required there in proof of the theory of εἶδη. The explanation is simply that Glaucon is one of the "we" whose "usual procedure" is to assume an εἶδος answering to every class name.[2] So in the *Sophistes* any careful reading of the passage about the εἰδῶν φίλοι reveals the fact that they form a numerous school, and consequently that they are not, as is sometimes fancied, an *alias* for Plato himself.[3] I cannot argue the

[1] See the references given in Burnet, *op. cit.* That the doctrine of ἀνάμνησις is peculiar to Socrates in a way in which the theory of εἶδη is not comes out repeatedly in *Phædo*, 72 *e*, ff. It is the doctrine ὃν σὺ εἴωθας θαμὰ λέγειν. *Cf.* 73 *b*, ἀπιστῶ μέν σοι . . . ἔγωγε οὔ, οὐδὲν μέντ' ἂν ἧττον ἀκούοιμι νῦν πῇ σὺ ἐπεχείρησας λέγειν. So 86 *b*, τοιοῦτόν τι (*sc.* ἁρμονιάν) μάλιστα ὑπολαμβάνομεν τὴν ψυχὴν εἶναι. The object of the interlude between Phædo and Echecrates, 89 *a*, ff., is to mark with special emphasis the importance of "Socrates'" dissent from the doctrine that the soul is the ἁρμονία τοῦ σώματος, in fact, to intimate that this is really the central issue of the dialogue. Note also that the refutation of the doctrine comes as a surprise to Cebes, 95 *a*, θαυμαστῶς ὡς παρὰ δόξαν.

[2] *Rep.* 596 *a*, ἀρξώμεθα ἐπισκοποῦντες ἐκ τῆς εἰωθυίας μεθόδου· εἶδος γάρ που τί ἓν ἕκαστον εἰώθαμεν τίθεσθαι κ.τ.λ; *b*, οὐκοῦν καὶ εἰώθαμεν λέγειν ὅτι ὁ δημιουργός κ.τ.λ.

[3] With regard to the εἰδῶν φίλοι it is enough to remark here that their position differs from any which is ascribed to "Socrates" in any Platonic dialogue by its absolute dualism. Their theory is that there is a world of mere γενέσεις, which we "participate in" with our *body* by means of sensation, and also another world of incorporeal real being which we apprehend by our *soul* through reasoning. Thus it appears that they look upon sensation as a purely physical process, and recognise only reasoning as psychical. From the silence of Plato it must be inferred that these "friends of εἶδη" know nothing of that positive relation between the worlds of Being and Becoming which Plato calls μέθεξις and παρουσία, and consequently that with them the realm of γένεσις cannot be thought of, as it is in the *Republic*, as something half-way between Being and Non-being; it must be opposed absolutely to τὸ ὄν as something which "is not". This, I take it, is why the final refutation of their position consists in insisting upon the inseparability of the νοῦς which apprehends εἴδη from ψυχή, which has, of course, for Plato also the inferior function of forming correct opinion based on sensation. ψυχὴ is here, as regularly in Plato, the intermediary between the two worlds, being at once the apprehender of εἴδη and the universal fountain of becoming. If this interpretation is correct, the doctrine of these friends of εἶδη must be a much more unqualified dualism than anything which Plato has ever ascribed to "Socrates," and consequently the criticism of the *Sophistes* cannot possibly be directed against Plato himself, but must be aimed at some one who, to put it crudely, had held the "Ideal Theory" without includ-

point fully here, but to me, as to Prof. Burnet, it seems evident that the only way to make sense of all this is to suppose that the general theory of εἴδη was, what Plato always represents it as being, an inheritance not only of Plato himself but of a number of allied thinkers from Socrates and his Pythagorean friends. Plato, in fact, no more *invented* the εἴδη than Kant invented the distinction between analytic and synthetic propositions or Leibniz that between necessary and contingent truths. And we may reasonably believe that the greater part of the *Phædo* is genuinely historical.

(2) As to the character of the supposed ecstatic vision Mr. Temple has, I think, gone wrong by not attaching sufficient importance to a striking peculiarity of all the passages he cites. In all of them "the language of initiation" is freely used to describe the passage from intellectual darkness into the light of truth. And in this simple fact lies, I think, the whole explanation of the phrases on which his theory rests. Plato is thinking of the actual scene in which the "initiate" were suddenly introduced into the brilliantly lighted hall at Eleusis to witness the sacred drama. Hence the ἐξαίφνης κατόψεται of the *Symposium*, the bedazzlement of the soul when first delivered from prison in *Republic*, VII., and the imagery drawn from illumination in the *Phœdrus*.[1] All this is part of the symbolism: what it symbolises is a truth entirely independent of

ing in it a doctrine of μέθεξις. In the present state of our knowledge, as it seems to me, everything points to Euclides as the person whom Plato has chiefly in view, though the metaphor of the γιγαντομαχία absolutely compels us to suppose that the criticism is meant to apply to a whole body of thinkers.

[1] For allusions to the "mysteries" in the *Phædrus cf.* especially 250 *b*, *c*, κάλλος δὲ τότ' ἦν ἰδεῖν λαμπρόν, ὅτε σὺν εὐδαίμονι χορῷ μακαρίαν ὄψιν τε καὶ θεὰν . . . εἰδόν τε καὶ ἐτελοῦντο . . . ἦν ὡργιάζομεν ὁλόκληροι μὲν αὐτοὶ ὄντες . . . ὁλόκληρα δὲ καὶ ἁπλᾶ καὶ ἀτρεμῆ καὶ εὐδαίμονα φάσματα μυούμενοί τε καὶ ἐποπτεύοντες ἐν αὐγῇ καθαρᾷ, καθαροὶ ὄντες, and 254 *b*, καὶ πάλιν εἶδεν αὐτὴν μετὰ σωφροσύνης ἐν ἁγνῷ βάθρῳ βεβῶσαν. It is perhaps a confirmation of my view that the whole theory of the philosophic ἔρως goes back to the historical Socrates that the comparison of the "philosophic life" with the initiation into the "mysteries" is made prominent in the *Clouds*. See the scene vv. 254 ff., where Strepsiades is formally "inducted" into the school of Socrates by a rite of θρόνωσις, especially vv. 258-259, πάντας ταῦτα τοὺς τελουμένους ἡμεῖς ποιοῦμεν. It should be noted also that the *Phædrus* does not represent the experience of the lover as a necessary stage in the progress towards the beatific vision of "what is". Beauty, though the most impressive, is not the only εἶδος which can awaken the soul from its mortal sleep; 250 *b*, δικαιοσύνης μὲν οὖν καὶ σωφροσύνης καὶ ὅσα ἄλλα τίμια ψυχαῖς οὐκ ἔνεστι φέγγος (another term borrowed from the "mysteries") οὐδὲν ἐν τοῖς τῇδε ὁμοιώμασιν, ἀλλὰ δι' ἀμυδρῶν ὀργάνων μόγις αὐτῶν καὶ ὀλίγοι ἐπὶ τὰς εἰκόνας ἰόντες θεῶνται τὸ τοῦ εἰκασθέντος γένος. Thus there is a harder and less-trodden path to heaven than that of the παιδεραστήσαντος μετὰ φιλοσοφίας, and it is this harder road which is trodden by the statesmen of the *Republic*, and the Socrates of the *Phædo*. Thus, the *Phædrus* gives no support to the theory that παιδεραστία is, for Plato, "the way to the highest spiritual experience".

the employment of 'ecstasy' as a means to attain the highest knowledge. The point is simply that though it may need a long and painful process of reflexion and analysis to prepare the mind for the apprehension of a great axiomatic truth, that truth, when perceived, is apprehended by a direct and immediate intuition; it is νοῦς, as Aristotle puts it, which is τῶν ἀρχῶν.

(3) That Plato's supposed ecstatic vision was the origin of the Ideal Theory cannot, of course, be true, if the doctrine of εἴδη, in its general outlines, is pre-Platonic, and belongs to a whole circle of thinkers, partly of Pythagorean affinities, among whom Socrates is the central figure. Of course, it might still be urged that the doctrine arose from an experience of the kind described by Mr. Temple, with the difference that we should have to ascribe the "vision" to Socrates, or some contemporary of Socrates, and not to Plato. But here again we have to reckon with the evidence of the *Phædo* which makes directly against any theory of this type. Mr. Temple has, in part, seen this himself, since, as his note on page 506 of his article shows, he is alive to the difficulty which would be created for him if the *Phædo* should turn out to be an earlier composition than the *Symposium*. That difficulty would, indeed, be much more serious than he is willing to allow, since, though the *Phædo* recognises an ideal καλόν, it gives τὸ καλὸν no exceptional place in the system of εἴδη, and is much more completely dominated by the concept of εἴδη of a purely mathematical kind, such as αὐτὸ τὸ ἴσον and the "Ideas" of the series of integers.

Even this is, however, a minor point. What is of fundamental importance is the biographical narrative put into the mouth of "Socrates," the only passage in Plato in which anything is said about the history of the theory of εἴδη. Plato there positively asserts that Socrates betook himself to the theory of εἴδη as promising such a teleological interpretation of the Universe as he had once hoped to find in the physics of Anaxagoras (*Phædo*, 99 *d*-100 *a*). (Note that he nowhere says that even Socrates actually originated the theory for himself, though his language certainly admits of that interpretation.) The account here given seems to me quite incompatible with the view that the belief in the εἴδη owed its existence, in any marked way, to ecstatic and extra-normal experiences on the part of any one: it is given by Plato in great detail, and apparently in all seriousness, and I submit, therefore, that it has the best of claims to be regarded as a piece of authentic history. The only possible reason for rejecting it seems to be the uncritical assumption that the "Socrates" of the dialogues is an imaginary personage, employed by Plato to express his own opinions, and that therefore the professed account of his mental development given in the *Phædo* must be merely imaginative. But this assumption, when looked into, has nothing in its favour, and everything against it. The part of the narrative which describes the early interest of "Socrates" in the theories of the

physicists, and, in particular, those of Diogenes, and his anticipations from the work of Anaxagoras, fits in exactly with the state of philosophy at the time when Socrates was a young man, and would be perfectly ludicrous as a description of the state of philosophy in a later generation.[1] Its chief points, moreover, can be completely confirmed from the Aristophanic caricature in the *Clouds*. Hence we have really no alternative but to accept at least the first half of the story as a faithful account of facts, and, this being so, it is almost impossible not to take the same view of the latter half. In a work now in preparation I hope to argue this point more in detail, and to do something towards dispelling the misconceptions which have been created by the curious prejudice that the "Socrates" of Plato must be unreal because he is interesting, but the "Socrates" of Xenophon real because he is common-place and a bore. Though even if the narrative of the *Phædo* had Plato himself for its hero, it would none the less leave no place for the supposed "ecstatic vision" as a decisive factor in the development of the "Ideal Theory".

(4) It seems to me that the assertion that Plato regards παιδεραστία as "*the* means" whether we are to understand by this phrase "the only means" or "the best means" "to the highest spiritual experience" is in conflict not only with other dialogues, but with the very passage in the *Symposium* upon which Mr. Temple's theory is based. If Plato held this view, why has παιδεραστία absolutely no place whatever in the very detailed exposition of the way to "the highest spiritual experience" prescribed for the philosopher-statesmen of the *Republic?* It is not by mystic revelations in moments of sexual passion, but by a long and steady process of analysis of the concepts and methods of science that the soul which has escaped its prison is there made meet to look upon the "Form of Good". So, too, in the *Symposium* itself all possibility of such sexual excitement has long been left behind before the philosopher "suddenly beholds" the supreme Beauty which is everlasting. The vision comes, not in the moment of passion, but only when what the vulgar understand by "love" has long been left behind. The raptures of passion have first to be despised as "mean and of no account," and the beauty of *all* fair forms to become the object of love. Then we have to ascend by degrees to the nobler love of the beauty of the soul; thence to the discernment of comeliness in "pursuits and laws". Even so the hardest part of our pilgrimage from earth to heaven lies before us. We

[1] If the narrative were, as is often asserted, an account of Plato's own mental growth, it would be inexplicable that it should contain no reference whatever to the ideas of the "Sophists," and in particular to the ἄνθρωπος μέτρον of Protagoras. The questions which the youthful Plato would have found "live" issues were such as these, "Is all virtue knowledge?" "Can virtue be taught?" "Does goodness come by nature?" not problems about the shape of the earth, and the nature of "that with which we think".

have yet to learn to discern beauty in the structure of science,—a task for which, it will be remembered, Plato in the *Republic* allows his picked students fifteen years as a reasonable period—and it is only then that we find ourselves at last on the threshold of the house of the heart's desire. Mr. Temple's theory would suppress all these intermediate stages of the ascent; he would have the lover leap at once from the lowest to the topmost rung of the ladder which leads from earth to the "place beyond the skies". Unless I have entirely failed to learn Plato's lesson, the city in heaven is not thus to be taken by violence. So again with the famous passage of the *Phædrus*. The passion of the lover for an earthly love may indeed, if diverted from an evil outlet, be the first step towards revival of "the memory of the antenatal vision," but it is nowhere said that the pilgrimage to God's house can be taken in a stride. The soul's "wings" begin to grow again, but we are not to suppose that they are full grown in a moment. And the complete exclusion of παιδεραστία from the *Republic* (the trifling concession made at 468 *b-c* to the specially distinguished warrior rather strengthens my case than weakens it, from the tone of perfunctory indifference with which the whole subject is treated) would seem to show that Plato does not regard it even as a *necessary* first step in the philosopher's "Progress from this world to that which is to come".

In conclusion, let me just remark, that Mr. Temple gives no ground for his adhesion to the wild theories which represent Plato as having in later life "torn in shreds his proudly built philosophy," beyond the assumption that the criticism of the *Parmenides* is directed against a doctrine which is specifically and exclusively Platonic. If the general conception of Plato's relation to his immediate predecessors which has been suggested in this Note should prove to be correct, as I trust it will, this theory, like so many other theories about Plato, will fall to the ground. It will follow that what is criticised in the *Parmenides* is a doctrine already generally current and accepted by a whole group of thinkers who were gathered around Socrates, exactly as has been already urged by Prof. Burnet. Plato cannot, in fact, have attacked "Platonism" in the *Parmenides*, because before the *Parmenides* and *Theætetus* "Platonism" as a distinctive philosophical doctrine did not exist. Of Plato's earlier works the statement of the Platonic *letters* that they are not "Plato" but "Socrates freshened up" will, in the main, be the truth.[1]

A. E. Taylor.

[1] It is worth noting that the repeated occurrence of such phrases in the *Epistles* goes some way towards affording evidence of their genuineness. If our view of the relation of Plato to his master is in the main correct, such an expression would be both possible and natural in Plato's own mouth at a time when the *Philebus*, *Timæus* and *Laws*, and possibly the great 'dialectical' dialogues were unwritten. It is much more unlikely that a forger, with the whole series of Plato's works before him, should have thought of making such a remark.

HUMANISM AND INTUITIONISM.

RELUCTANT as I naturally am to deprecate research into the philosophic affinities of Humanism, and great as was the interest with which I read Mr. Walker's ingenious paper in N.S., 67, I cannot honestly advise our critics to commit themselves very deeply to the line of argument it advocates.

The reasons for this advice are (I.) that Mr. Walker has wholly overlooked important differences between Humanism and the Intuitionism of Martineau, and (II.) that he seems incautiously to have adopted some of the most indefensible of the misconstructions of Humanism which are still current.

I.

(1) While it is perfectly true that Intuitionism makes morality, as Humanism makes truth, depend on judgments of Value, yet there is an important difference in their respective conception of these primary values. For though there are no intrinsic reasons why intuitions should not be treated empirically, in all extant intuitionism judgments of value are taken to carry with them a guarantee of their validity which seems to be essentially *a priori*, and Martineau's originality lay merely in his gallant attempt to overcome the empirical contradictions arising out of conflicting intuitions, by arranging the intuitive springs of action in an order of merit. Hence it is of the essence of ethical intuitionism both that the formal *claim* to value should be taken as assurance of validity and that no appeal to the *consequences* of acting on intuitions should be allowed to reflect upon and to determine their value.

Humanism, on the other hand, has the utmost respect for intuitions of all sorts. It regards them as psychological facts of the greatest interest, importance, and significance. It would not attempt to do without them either in ethics or in logic. It would define them as immediate judgments of value. But it would respect without adoring. It could not refrain from examining claims before admitting them as infallible guides to validity. It would regard it as uncritical to treat them as anything else than psychological. In the first instance at any rate it would treat the claims of Intuition as something which might require confirmation by experience. In this respect truth-claims and intuitive moral judgments are fundamentally alike: both are made constantly and

freely and spontaneously, and are chronologically prior to the sciences which criticise them. Hence they form the data from which a prudent theory of logical and ethical values will set out. But the mere fact that such claims are made does not prove that they are infallible: they may still require confirmation, and God knows they mostly need it!

(2) Now this confirmation is conceived differently in the two systems. For whereas in ethical intuitionism it comes once for all (as we saw) *before* experience in the table of the priority of the springs of action, for logical humanism it comes gradually *in experience*, in the empirical consequences of acting out the various claims. Mr. Walker has apparently quite forgotten this empirical side of Humanism.

(3) Yet herein lies the answer to his complaint that no attempt is made to tabulate the *a priori* values of logical intuitions. If humanism attempted anything so foolish as to construct a preliminary scale setting forth the relative importance of different satisfactions, it would first of all have to cease to be empiricism, and in the next place have to stultify itself by laying claim to a knowledge of absolute values, which no one has ever yet got hold of, and the despair of which has manifestly driven the chief modern exponents of absolutism over into utter scepticism.

(4) Mr. Walker has unfortunately failed to observe that humanism commits itself as little to an insuperable dualism between the 'true' and the 'right' as it does to a vain attempt to reduce the right to a matter of mere intellect. By calling 'truth' logical value humanism includes it in the same genus with 'right' and 'good' and 'beautiful' and 'pleasant,' and accounts for the persistent habit of all men to transfer the terminology of one species of value to another. This, however, is not to confuse, but to give a clue to current confusions, and why any one should regard it as in any way derogatory to the intellect baffles my understanding.

II.

(1) Why then Mr. Walker should assent to this baseless calumny, and accuse us of 'degrading' and 'belittling' the human intellect rather than of restoring its self-respect together with its efficiency, it is hard to conjecture. If he would try to discount his bias and think the matter out, he could not but perceive that the real degraders and belittlers of the intellect are those who alienate it from life, set it useless, meaningless, and impossible tasks, and finally denounce it as incompetent when it refuses to perform them.

(2) At any rate until such time as intellectualism has excogitated an account of truth that will not be either manifestly incoherent or else formal and unmeaning, and will succeed in discriminating truth from error and overcome the scepticism to which Messrs. Joachim and Bradley have now openly confessed, humanism can

hardly be blamed for renouncing the presumptuous attempt to say what absolute truth may be, and for confining itself to the humbler task of describing what human truth actually is. And in the execution of this task it will not allow itself to be intimidated by accusations that its truth is 'relative' and 'subjective' and 'probable' and devoid of 'objective validity'. If there is any force in these epithets, so much the worse for all human truth, *i.e.*, for all the truth we any of us have. Scepticism, which by Mr. Bradley's own confession has already devoured the Absolute, will then triumph over man also. But I cannot see that these epithets do anything but beg the question. What is 'relative' to man is at any rate related to him. What is 'subjective' is something *we* can possess. Even a probable truth seems preferable to an impossible ideal. As for 'objective validity' (if it is properly defined), our truth has quite as much of it as we need or it needs, if it is to be progressive. It is preposterous to define 'objectivity' in such a way that no objects of human thoughts can attain it. All this flinging about, then, of dyslogistic terms does not alter the facts that human truth we have, that no other seems possible, and that we may as well get reconciled to its character.

(3) Further reflection upon this situation may possibly convince Mr. Walker that humanism has no need to impinge on either horn of his dilemma, 'either a return to absolutism or a return to Aristotle'. It is protected against the fury of the bull that bears them both by an impassable chasm. For (*a*) the Absolute does *not* "provide the common ground" truth is supposed to presuppose, just because it is plainly impotent to *get to* the position of human knowledge. It can, therefore, neither explain nor confirm nor invalidate it. Its "immanent revelation of itself in finite centres of consciousness" would *not* "secure an approximate conformity of their thinking to its own". For the vital connexion is merely a dogmatic assertion and a matter of faith. No one has ever been able to think the relation of the Absolute to the "finite centres". All the attempts to do so have ended by annihilating either the Absolute, or the finite centres, or both. Moreover, even if the relation could be thought, it would leave the actual difficulties of knowledge just where they were before. We should have no new means of getting human thoughts to converge towards an "approximate conformity". For the thought that the thought of each of us is approximately conforming to the Absolute, besides being the mere postulate of an unverifiable faith, a mere *credo quia impossibile*, provides no standard whatever for the correction of human errors. We shall not be better disposed to acknowledge our errors by the belief that we are vehicles for the enunciation of absolute truth. Nor could it reasonably serve as an ideal for us, because we should have to admit that we in our finitude were necessarily precluded from realising it. Instead of helping, therefore, it would hinder, by implanting in us the discouraging conviction that abso-

lute truth was the only truth worth having, but that man *qua* man could not possibly attain it.

(*b*) Aristotelian realism is nothing like so bad. It is no hindrance: but it is no help. The 'objective validity' to be secured by grasping "objective entities and their relations" is a harmless notion. But it is quite unmeaning so long as no one is prepared to tell us *when* the 'object' we are contemplating is an 'objective entity' as defined, and not a 'subjective' approximation to it that will have to be transcended with the next step forward. What then is the use of talking about independent 'objects,' without being able to say either how we are to know when we have got them, or how once grasped by human thought they can continue to be 'independent'?

(4) It is quite a mistake, however, to attribute to humanism any hostility to any sense of 'object' which performs any actual function in our knowing. There is no philosophic position which is less open to the imputation of solipsism, or better in accord, if not with "the philosophy of common-sense" (p. 315), yet with common-sense itself. Nor will it shrink from 'agreeing' with Aristotelian and Absolutist that "the knowledge of subject and object is immediate and is simultaneously developed" (p. 312). It will insist only on adding (1) that to a human 'subject' there must 'correspond' a human 'object,' (2) that it has never asserted the life we know to be merely an 'inner' one, and (3) that the 'immediate knowledge' alleged does not carry us out of the region of 'claims'. It will mildly inquire how self-evident intuitions which are true are to be discriminated from those which are false, except by experience of their consequences.

After that it will set itself seriously to solve the problem which no form of intellectualism has so far recognised as a problem, *viz.*, as to how among the mass of 'objects' which all alike claim 'reality,' we contrive to *select* those which are *really real?* When Mr. Walker has discovered or devised a better, surer and more expeditious way of doing this than ours, he will not find humanists slow to welcome it. But until he has perceived that this is the vital problem, he can hardly claim to have adequately differentiated himself from the multitude of those who do not yet perceive the point at issue.

F. C. S. SCHILLER.

VI.—CRITICAL NOTICES.

The Roots of Reality. Being Suggestions for a Philosophical Reconstruction. By Ernest Belfort Bax, Barrister-at-Law. Pp. xii, 331. London: E. Grant Richards, 1907.

In the introductory chapter of his book Mr. Bax lays down certain fundamental doctrines, which he regards as the assured result of modern philosophical Idealism and the necessary starting-point of all future construction. The most important of these doctrines are as follows: 1. "Reality is synonymous with conscious experience possible or actual." 2. "The self consistency of consciousness as a whole constitutes the ultimate test of truth." 3. "An analysis of consciousness discloses that every conscious experience or reality cannot be analysed into less than two elements" —a logical and an alogical element. The first two doctrines are familiar enough; it is the third that gives distinctive character to Mr. Bax's philosophical view, and it may be said in fact to constitute the main theme of the book. The author's constant endeavour is to maintain against the panlogism (or "pallogism" as he prefers to say) of the Hegelian school the necessity of recognising an alogical element pervading or underlying all reality—an element which can never be fully brought under the categories or relationships of thought.

How far the argument is really relevant to Hegel himself may be questioned, for what Mr. Bax actually criticises is rather the sort of modified Kantianism that is represented by Green, against whom he insists in the usual way on the place of feeling or the material element in experience. Mr. Bax's own position might perhaps be described by way of contrast as a Kantianism that has been much influenced by Schopenhauer. For, while he identifies reality with actual or possible experience, he finds the source of all experience in an ultimate or transcendent Subject "out of which all consciousness wells up"—a Subject which is at all events comparable with Kant's own Thing-in-itself and with Schopenhauer's Will, though not identical with either of these conceptions. This Subject is conceived, in dialectical fashion, as first giving itself a content or object in feeling or the alogical, and then reacting upon this content by its logical or formative activity. Hence reality or experience in all its forms is held to imply always these three elements: "(1) an 'I' as subject which feels; (2) an

opposing feltness, the negation of this 'I' as such; and (3) the reciprocal fixation of the feltness by the subject which feels, and conversely. The first two of these elements constitute respectively the possibility of apprehending and the possibility of apprehendedness. We may term them the *matter* of consciousness. The third element, that of reciprocal relation, which we call thought, reason, or the logical, as *form* of consciousness, completes the primary synthesis—*i.e.*, consciousness-in-general—the universal synthesis which all more concrete modifications pre-suppose. Such, and nothing else, is the ultimate nature of reality. The above synthesis is the eternal framework of reality, and when we postulate reality in any sense whatever, this it is that we wittingly or unwittingly postulate. On close inspection this primordial synthesis resolves itself, strictly speaking, into its primary element, as Fichte showed. Feltness is nothing but a modification of 'I' as feeling, and thought is, again, nothing but the reaction of the *that* which feels upon the *what* of its feltness" (p. 36, *cf.* p. 290).

Such being Mr. Bax's general scheme of the ultimate nature of reality, his main concern, as has been already indicated, is to emphasise the significance of the alogical element or elements in the scheme—a significance which has been unduly minimised or ignored in the more Hegelian developments of Kantianism. In opposition to such developments he seeks to bring out the essential priority of the alogical over the logical, the inability of logical forms ever wholly to circumscribe the alogical matter of reality.

The general tendency of his argument will be most easily seen by referring to some of its applications. In chapter iii. he argues that "in every real process, at whatever stage we choose to take as our starting-point, although there is much in it which is perfectly reducible to law, yet there is always a remainder left over that cannot be reduced to law, or the relation of cause and effect" (p. 82). This remainder must be ascribed to chance, "that element in the reality of change which is irreducible to law or the causal category". Any event, it is argued, when viewed in all its concreteness, is seen to result from the consilience of several distinct causal series. Now, although we can always trace a causal connexion at any given point in each of these series, yet in the fact that all the various distinct series, each of which again involves the consilience of other series, thus coalesce in just this way, *i.e.*, in the event considered "as a *focussing* of an infinite series of events proceeding from 'all quarters,' there is an element of contingency, of chance, of alogicality, in short, utterly irreducible to causality, but which forms, nevertheless, a part of the very essence of the event as *real*" (p. 85). It is interesting to note that Mr. Bax here uses to prove his alogical chance the very same argument as Janet has used to prove final causes.

Again, in chapter vi., Mr. Bax finds in the antithesis of the logical and the alogical a solution of the ethical controversy be-

tween Libertarianism and Determinism. "Reason, in the form of reflective thought, presents our actions to us as through and through necessitated; immediate feeling presents them to us as altogether spontaneous. This contradiction cannot be transcended by thought, since it has its ground in those alogical elements that are prior in nature to thought" (p. 183). "In every moral action, just as in every other event, there is a law-element as well as a chance-element. The general principle of the action can be deduced from the character of the individual performing it, in a word, can be regarded from the standpoint of the category of causation. In so far as this is the case, the individual may be said to be not obnoxious to praise or blame, since his action is determined" (p. 186). But, besides this element of determination by character, "there is the other element in moral action as in every temporal event, spontaneous, aleatory, and altogether irreducible to the principle of causation" (p. 187). And it is to this alogical element in the action that the moral 'ought,' with its praise or blame, alone applies (p. 188). "Every ethical judgment, as such," the author says elsewhere, "is pre-eminently alogical" (p. 318, note). Unfortunately for this solution of the ancient controversy it is precisely with the determination of an action by character, and not with its mere spontaneity or impulsiveness, that ethics connects responsibility and freedom.

In a recognition of the infinity of the alogical Mr. Bax sees a way of escape from some of the most perplexing questions of metaphysics. A great deal turns, he would urge, "upon the distinction between regarding the Absolute as a wound-up whole, a closed system, a finally complete synthesis, and regarding it as principle merely, timeless principle of eternal change in time. If we adopt the latter view, we at once escape the contradictions and inconsistencies raised by the notion of the Absolute as system complete once and for all" (p. 269). "The Absolute, so far from being the unchangeable eternal, is, on the contrary, the eternal principle of change. It is eternally realising itself under ever new forms to which we can assign no finality" (p. 274). Now, that the conception of a timeless and changeless Absolute, seems hard, or impossible, to reconcile with our actual experience of change in time may be admitted, and one may go far with Mr. Bax in his criticism of this conception. What one cannot so easily admit, however, is, that his own conception of a "timeless principle of eternal change in time" is so much better off. It seems no less inconsistent than the other. Mr. Bax himself recognises that the problem of the metaphysical ultimateness of time "confronts us on the very threshold of a thoroughgoing metaphysical analysis," but, since he finds it beyond the scope of his present intentions to discuss the problem fully, we are left in doubt as to the way in which he would propose to develop and vindicate his own conception in view of it.

As a last example we may take Mr. Bax's final word as to philosophy itself. "It might be supposed," he says, "at first sight, that, whatever might be the case with æsthetic beauty or moral goodness, philosophical truth at least had logical reason for its final arbiter. Such is, however, not quite the case. If we consider the matter closely, we shall see that the conviction of the truth of a given philosophical formulation, or, in other words, the conviction of the adequacy of the formulation as expressing in the terms of abstract thought the self-consistency of consciousness, rests in the last resort upon feeling—namely, the feeling of intellectual satisfaction it affords. Hence here also, no less than in the sphere of art or ethics, we are forced back upon the bedrock of the alogical as our ultimate arbiter" (p. 307).

However little one may be inclined to accept Green's version of Kantianism, it seems evident enough from these examples that Mr. Bax's opposed version lays itself open to very serious criticism. That the general aim of his contention against "pallogism" (or "gnosticism," as Prof. Campbell Fraser would say) is right may be admitted. And the main interest of the book certainly lies in the consistent way in which Mr. Bax seeks to follow, through a wide range of philosophical problems, a single line of thought, and in his endeavour to present a version of Kantianism in which the one-sidedness of Green's version will be corrected. It is not possible, however, to regard his conception of the alogical as realising his general aim at all satisfactorily. To begin with, the conception seems not to be distinct in itself. It seems to combine the two inconsistent parts of a presupposition outside experience and a factor within experience. The former is its part, when Mr. Bax emphasises the priority of the alogical and attributes all experience to an ultimate Subject having as its object its own alogical modifications or feltnesses. And the difficulty then is to understand how the subsequent *logical* operation of this Subject can take effect upon, or be related to, an originally *alogical* content. To say that the whole analysis is only dialectical would, of course, be no answer so long as the priority (in any sense) of the alogical is maintained. On the other hand, so far as the alogical signifies only the *matter* of experience as contrasted with its *form*, or the Kantian Sensibility as contrasted with Understanding, it is only one factor in experience, inseparable from the correlative factor; and there is then no ground for attributing to the alogical any essential "priority in value". From this point of view, therefore, it becomes impossible to understand why Mr. Bax should have recourse at all to an ultimate transcendent Subject out of which experience or consciousness has to "well up". If we are to be in earnest with the doctrine that reality is synonymous with conscious experience, it should not be necessary for consciousness (in this sense, in which it is synonymous with reality) to well up from

anywhere. Mr. Bax's argument to the contrary is far from convincing. "A bare subject without object," he says, "may be unimaginable, but it is not in the same way impossibly absurd as is the bare object cut off from the subject. In other words, a system of felt, thought, and willed determinations without a feeler, thinker, or willer, is a sheer contradiction in terms. The object itself is, in the last resort, metaphysically deducible from the subject. The *thought-feltness*, which we term object, clearly has its *raison d'être* in the feeling and thinking agency or subject. Hence the alogical (here the primordial subject) has clearly a presuppositional value, from the metaphysical point of view, superior to that of the logically determined object" (pp. 155-156). This reasoning seems to play fast and loose with the correlation of subject and object. Whatever existence or significance the so-called subject may have beyond the relation of subject and object, this existence or significance is at any rate not that of a subject as such; and the argument, therefore, has changed its ground.

The source of these difficulties is not, I think, far to seek. Mr. Bax, it seems to me, commits essentially the same error of principle as Green himself—that of ignoring, or insufficiently recognising, the difference between what is true of the finite human consciousness and what is true of the universal consciousness which is conceived as free from all finite limitations—an error to which all forms of Kantianism are very liable. In Green's case it is the predicates of the universal consciousness that are transferred to the human without sufficient regard for the limitations of the latter. In Mr. Bax's case it is the other way about. Predicates or distinctions that are obviously applicable to the finite and progressive, but ever incomplete, knowledge of man are uncritically transferred to the consciousness which is all-embracing, and therefore raised above the level of all such distinctions. The universal consciousness, for instance, cannot possibly be regarded as being under the necessity of giving form to an as yet unformed matter. The dualism of form and matter can apply only to a finite or progressive consciousness. There is, however, one advantage of Mr. Bax's insistence on the characteristics that express the finitude of the human consciousness. He tends to be impatient (and rightly so) of metaphysical conceptions in which the problems of our finite experience are evaded rather than answered. A static Absolute, in which all the difficulties raised by our experience of change and imperfection and striving are simply suppressed, receives no favour at his hands. True, his own conception of the alogical can hardly perhaps be said to do more in the end than find a symbol for these difficulties; yet at least it has the value of recognising them frankly and of keeping them prominently before us.

Mr. Bax's book is written in a clear and direct style, and will present no difficulty to the philosophical reader, but I think it is less likely to fulfil the purpose, mentioned in the preface, "of

reaching the average intelligent man, who is now beginning to interest himself in speculative problems". The whole design of the argument, and the numerous allusions which are made to philosophical doctrines, presuppose a considerable knowledge of the history of modern philosophy, which the average intelligent man, even if he does "interest himself in speculative problems," can hardly be assumed to possess, and the lack of which will not be supplied by the very slight and rapid historical sketch given in the introduction. But whether or not Mr. Bax is likely to succeed in this special purpose, his exposition no doubt gains by keeping it in view, and the philosophical readers to whom his argument more properly appeals in respect of its matter will not complain of his effort after a more popular form.

HENRY BARKER.

Human Nature in Politics. By GRAHAM WALLAS, M.A. London: Archibald Constable, 1908. Pp. 301.

A CURIOUS *rapprochement* is to-day observable between a certain section of philosophers and a certain section of men of affairs. For many years, the business of a philosopher—I am speaking of the expert, the whole-hearted academic variety—has been dominated by a conception so highly intellectualistic that the plain man (Mr. Sidgwick's species) has decided that its discussions do not affect him in any way whatever, and has turned to Science which, for a long time, escaped the difficulties that Philosophy felt, by assuming all the fundamentals it needed. To the man of affairs, to the administrator and politician, Philosophy was, indeed, either non-existent or irrelevant, and Science itself valuable only for making and breaking things and providing transit.

The dawn of the twentieth century shows some remarkable transformations. A number of philosophers, some of them learned and acute, and all of them vigorous, have completely broken away from intellectualistic traditions and are explaining our intellectual nature as a means to an *end*, or, rather, a series of *ends* or goals set for us, not by our intellect, but by our desires and feelings. Science has given up dogmatic metaphysic, especially the negative dogmatisms of the nineteenth century—of course I am speaking of the foremost scientific thought only—and limits itself, despite a few speculations on the ultimate nature of Matter, to correlating facts; and is not now so prone as heretofore to provide us with ideals of life.

As a sign of the remaining transformation scene—may this at least not be followed by a harlequinade—comes Mr. Wallas's book. We need more intellect in politics, says he; we want a philosophy, a psychology of politics; it will not do to go on muddling through, and entrusting government to the cleverest manipulators of popular ignorance.

At first sight, there seems little to hope from such changes, they appear indeed largely to cancel one another. But I am convinced that what we have before us to-day in the world of thought is much more a *rapprochement* than a mere renewal of the conflict under new banners between emotionalism and intellectualism. It certainly appears somewhat quaint just when an important philosophical school is proclaiming the bankruptcy of intellectualism, and when science is disclaiming the right to dictate ideals, for a practical politician and administrator to step forward and say in effect that the people are perishing for lack of knowledge, and that the highest and driest of scientific methods—that of quantitative research and summation—is the *sine quâ non* of improvement in methods of government. It would appear that one would need to perform feats of saltation almost Chestertonian in complexity to accomplish a reconciliation between such views as these.

That, however, a *rapprochement*, if not a reconciliation, is actually taking place is evident, I think, from three indications.

Firstly, from the whole pragmatic movement in philosophy.

Secondly, from some marked tendencies of modern psychology.

A *rapprochement*, I said; and two months after this review was written appears a book by Mr. McDougall on Social Psychology, whose task is to trace more or less in detail the origin and growth of the principal tendencies of the human mind. The man of science concludes almost at the point at which the man of affairs begins. The last paragraph in his book might well stand as the text of Mr. Wallas's first section.

"Our brief review of the social operations of the primary tendencies of the human mind is finished. Enough, perhaps, has been said to convince the reader that the life of societies is not merely the sum of the activities of individuals moved by enlightened self-interest, or by intelligent desire for pleasure and aversion from pain; and to show him that the springs of all the complex activities that make up the life of societies must be sought in the instincts and in the other primary tendencies that are common to all men and are deeply rooted in the remote ancestry of the race."

And if our memory serves us for ten years or so, we remember the valuable book of Mr. H. R. Marshall—the American psychologist—on Instinct and Reason, whose thesis, like that of Mr. McDougall, is the enormous range of the instinctive and irrational in human minds.

And thirdly, from the unmistakable indications that the mental conditions which produced Mr. Wallas's book are to-day by no means unfrequent among educated politicians and administrators. They are not an idiosyncrasy, a set of abnormalities specifically characteristic of Mr. Wallas. As I have said, the mental state he portrays is by no means uncommon; though he is the first, as far as I know, to give poignant and sustained expression to it. A political worker with an Oxford training, with an intense realisation

of the State as an entity to which passion (in Mr. Shaud's and M. Ribot's sense) is attachable, and for which indeed it provides a glorious inspiration; thrown back somewhat by the discovery that popular compulsory education, from which so much was hoped, does not provide us with reasonable voters; alarmed at the success with which voting is manipulated by all sorts of private and corporate interests, many of them inimical to the State; yet shuddering away from the path so often followed by the disillusioned—the path of quietism and more or less cynical resignation to inevitable hopelessness—thus Mr. Wallas as revealed by this book.

Must we leave the political field to the manipulator of votes on the one hand, and to the ignorant optimist on the other? Must we shut our eyes if we wish to continue to hope? Is a faith in human betterment only possible to those who fly in the face of the facts? Must those who alone are competent to measure detailed facts lose their sense of the whole in knowledge, and their love of the State in action?

Mr. Wallas tries to answer all these questions in the negative. He often stands on very narrow ledges, but this makes his book all the more valuable; as one feels that he has gone about talking to competent thinkers of all kinds, putting his ideas before them, and listening and learning from their answers. Often indeed he embodies their answers in paragraphs which are in antagonism to the main current of his own thought. But he never leaves one thinking that the objections are more than qualificatory; one is steadied and slowed down, but never hurled off the track.

The whole scope and process of the book is aimed against those who, following the early idealists and political thinkers who translated their wishes into facts, deal with Politics and the man as politician with simplifications so violently unreal that they never get back to the complexity of nature. This state of mind is not unknown in sciences other than that of Politics, but in the latter it is held to be especially dangerous. And too often there is, with the politician, a violent disruption between his earlier and his later knowledge; he finds the "political man" so flagrantly unreal and, by mere dint of practice, so changes his view as to what the political man is, that he sets aside his books and just gets forward, if at all, by means of practical "tips" from practical people.

Just as in Education, some of us are striving to see more clearly what the facts are, so that our theories may be in touch with reality and indeed be, in very truth, reality understood; so in Politics, Mr. Wallas deprecates the sundering of theory and practice as fatal to both. He sets out by asking us to consider the nature of the impulses which drive us on to action, and here he is everywhere indebted to Prof. James's *Principles of Psychology*. He has a comprehensive grip of what an acceptance of evolutionary principles involves; progress is perhaps assured, but only in so far as we consciously aim to supplant the cruder, unreasoning activities

of a state of nature. Perhaps after all—it is too soon to speak with confidence—there may be, though this is not the author's assertion, a secular tendency to variation which is not quite unbiassed nor even dependent on selective breeding; and if so, progress will almost certainly be regarded as the proper name for the result of this developmental trend. To accept this tendency as an ideal, what Prof. James calls, I think, being on the side of the Universe, or, in Mr. Spencer's words, "becoming a self-conscious agent in the evolution of the universe," will always be popular. The author has not referred to this conception of progress; but, if he had, he would unhesitatingly have rejected it. For the scientists in Politics are indeed to-day *Athanasius contra mundum:* not for them is the easy acquiescence in the thing that is, or is becoming; it is not for them to range themselves among the ranks of a large and constantly increasing army. Fully recognising, and, indeed, dragging into the full glare of day, so that he who runs may read, all those inherited tendencies to impulsive action and to inconclusive thought which make democracy so dangerous—a section dealing with names, which, despite Shakespeare, affect the scent of the political and even of the economic rose, supplies good illustrative matter for the psychologist—Mr. Wallas asks us in Part II. of his work whether there are no hopes of change, not merely in a cosmic, but in a moral, sense. He thinks there are. But we shall have to face the facts. We shall have to ask ourselves very seriously whether representative government—even if, unlike Plato, we grant the consent of the governed to be necessary to good government—does really, under present arrangements, give us reason for inferring that there is any real consent. And above all we shall have to make the change which Education in England, despite strong advocacy, refuses to make, but which has begun in Political Administration, of quantifying all our conceptions and working up from the almost inextricable tangle of Nature to simpler summarised generalities, all of which must be held together in mutual quantitative delimitation. "Am I easier to be played on than a pipe?" asks Hamlet. Well, if the economic aperture was allowed free vent it was once thought that man's tune would be sure to be all right; but now we want exact comparative estimates of all the influences which "call the tune," of which "paying the piper" is only one.

Mr. Wallas then, whilst pragmatist in his method of presentment, is, in the best sense, intellectualist in his method of solution, not in the sense of worshipping the idealist's Absolute, which swallows up one's difficulties, but by demanding that they should be patiently worked out and evaluated by the strictest methods known to Science. But the pragmatist and emotionalist may answer, "What is this but to get back again to the old deification of Reason; we are to find our Reasons by quantitative summation instead of by insight, that is all! How will that help us to move

forward? And will not the true politician, on this view, become merely an addition to the present army of specialists, who, absorbed in their own pursuits, greedy for facts, incapable of speculation, have bidden Utopia good-bye for ever, like Mr. Wells's Washington friends?" No, says Mr. Wallas in effect; passion must beat pulsatingly through all; we must love the State, not with a blind, unseeing love, but with a love that notes the sparrow's fall, and gives exact numerical estimations (fortunately becoming a less arduous task) of the very hairs of our heads. Only then, with such a fusion of thought and feeling, can any man hope to be of real service either to his city, to his country, or to that vaster Empire of the World which some of us at times still dream of as the realisation of the kingdom of heaven which is said to be within us.

To all those—and surely their number is increasing—who hope that our emotions and our most severely rational conclusions will not for ever remain sundered, and who are willing to take thought that our democratic ship of State may not founder, I heartily commend this book.

W. H. Winch.

VII.—NEW BOOKS.

The Philosophy of Gassendi. By G. S. Brett. London: Macmillan & Co., 1908. Pp. xlv., 310. Price 10s. net.

Mr. Brett's main object in publishing this monograph is to convince philosophical students that the thought of Gassendi (by the way, ought not the preference of this way of writing the name to have received some sort of justification?) has a much greater value for our own time than is commonly suspected. The exact nature of this value is unfortunately made difficult to discover by the author's rather vague and obscure style as well as by the method of exposition he has adopted. In the greater part of his book he has chosen to reproduce Gassendi himself in free paraphrase relieved by an occasional excursion into criticism, with the result that the reader is constantly in doubt how far Mr. Brett himself acquiesces in what he delivers without comment as the doctrine of the French philosopher. It would, I should say, have been far better to make a clearer separation between the paraphrase and the criticisms, so that readers might have known more definitely what the author's own precise standpoint is. This might easily have been effected without unduly increasing the bulk of the book if Mr. Brett had been a little less chary in the matter of footnotes. A more serious defect is that the author's criticisms are too much of the nature of *obiter dicta* on particular points; there is little evidence of any serious attempt to examine the system of Gassendi as a whole in respect of its connexions with the past and its direct influence on the future. Indeed, I doubt if Mr. Brett's knowledge of the history of thought would have proved quite equal to the execution of the task. In dealing with the relation of Gassendi to the past, the essential requisites are a thorough knowledge of two things, the ancient Atomistic systems and the Aristotelian doctrine in the form in which it had been consecrated by the Church of the later Middle Ages. Now Mr. Brett's knowledge both of Greek Atomism and of mediæval Aristotelianism seems, from indications scattered throughout his book, to be rather slender. *Cf.* his scanty remarks about Leucippus on page xx, and his "hedging" at pages xxi-xxii on the all-important question of the kind of motion ascribed by Democritus to his atoms, and his amazing attempt to make it appear that the Epicurean "declination of the atom," the *fatis avolsa potestas* of Lucretius, means a power "saved from the fates in order *to be subject to law*," page 237. Surely Mr. Brett would not have credited Epicurus of all men with the belief in the "reign of law" throughout the universe if he had known or remembered Epicurus' own saying that "it would have been better to follow the tales about gods than to be slaves to the fate of the physicists, for the former doctrine holds out a hope of getting over the gods by worship, but the latter sets up a necessity which there is no getting round". So it looks at least suspicious that no hint is given on page 3 that the logical

canons there quoted are taken verbatim from the Greek of Epicurus, and that we are told at page 282 that "the atoms of Democritus were meant to be physical points". Again it should have been pointed out that the whole doctrine of the "rational soul," which Mr. Brett finds it difficult to bring into connexion with Gassendi's generally materialistic psychology, is taken over bodily from the traditional Aristotelianism, with the inevitable consequences which always arise in the attempt to make an eclectic fusion of two radically inconsistent systems. And if Mr. Brett gives us no adequate account of the way in which Gassendi attempts to construct a doctrine of his own by grafting Aristotelian Psychology and Ethics on a stock of revived Epicurean Atomism, neither does he seriously consider the relation of Gassendi to his great contemporaries, Galileo and Descartes. If he had done so, he might have discovered that the prolixity and irrelevant erudition of Gassendi are not the only reasons why his work has been forgotten by posterity, while that of Galileo and Descartes has remained perennially fruitful. For Descartes in particular Mr. Brett seems to cherish a certain dislike, but his antipathy should not blind him to the facts that Descartes had at least the merit of possessing new ideas and a new method, and that the method at any rate led to the creation of modern geometry. And it is a serious flaw in Mr. Brett's book that no consideration is given to Gassendi's very striking criticism of the new Cartesian ideas in his "objections" to the *Meditations*. We could easily have spared many pages of paraphrase of the details of Gassendi's physics or half-hearted criticism of his not very original views about space and time, in exchange for an examination of his attitude to the "ontological argument" which constitutes the very heart of Cartesianism. The discussion of later doctrines in which Mr. Brett detects atomistic tendencies, such as those of Leibniz and Lotze, given in the "General Review" at the end of the volume, is much more satisfactory, and, for my own part, I find the pages devoted to criticism of Lotze incomparably the best part of the book. Only one does not quite see what reason there is for their being included in a work on Gassendi. If Lotze finds a place there simply on the ground that his theory may be said, in a way, to include an element of spiritualistic atomism, why should Herbart be passed over in silence? But why does Mr. Brett hold that Lotze is advantageously distinguished from Leibniz by the fact of his being a student of physical science? Was Leibniz not a student of physics and biology (p. 288)? On the whole I cannot feel that Mr. Brett has any new light to throw on Gassendi's fundamental positions which seriously affects the estimate usually given of him in the current histories of philosophy. The author's style is unfortunately neither elegant nor even always grammatical (*e.g.*, he uses "like" as a conjunction, p. 276), and he has an irritating weakness for unnecessary and uncouth verbal coinages, such as "appulse," "multiplex," "be-ent".

A. E. Taylor.

Modern Classical Philosophers: Selections illustrating Modern Philosophy from Bruno to Spencer. Compiled by Benjamin Rand, Ph.D. (Harvard). London: Constable & Co. Boston and New York: Houghton, Mifflin Co., 1908. Pp. xiii., 740. Price 10s. 6d. net.

Students at the universities will undoubtedly be grateful to Dr. Rand for this convenient volume, in which they will find brought together texts which have had to be sought hitherto dispersed through a score of different books, and teachers of the History of Philosophy will be equally glad of the appearance of so convenient a companion to their lectures.

The selections from continental thinkers have for the most part been taken from translations which have already won recognition for their accuracy and literary merit, and the fidelity of those which appear here for the first time is reasonably guaranteed by the name of Prof. Royce. If there is a feature of the work which is open to criticism, it is the rather arbitrary conception by which the editor has been guided in his selection of texts. It is surely a mistake, in view of the great historical importance of the Herbartian influence upon German thought, that Herbart should be entirely ignored, and the whole of German post-Kantian philosophy represented exclusively by extracts from the "idealist" writers, Fichte, Schelling, Hegel and Schopenhauer. I cannot help thinking that it would have been well worth while to include a dozen or twenty pages of characteristic passages from Herbart at the cost of entirely excluding Schelling, and even, if necessary, Schopenhauer. In the earlier sections of the volume, too, it is a pity that Hobbes is represented exclusively by his psychological and social doctrine as given in the opening chapters of *Leviathan;* enough should have been included from the *De Corpore* to give the student some insight into the peculiarities of Hobbes's nominalistic logic and his doctrine of space and time. And is it too much to ask that when the book reaches its inevitable second edition the method of Descartes should be illustrated by selected passages from the *Regulae* rather than by the first two divisions of the *Discourse?* As a mere introduction to the "Geometry" which it accompanied, the *Discourse* is significant enough, but when taken by itself as a substantive treatise on scientific method, it might almost be said to conceal more than it reveals. I would also suggest that it is provoking to find the proofs of the existence of God in the third *Meditation* given without any indication that they are intended to lead up to the crowning "ontological" argument of the fifth, and that the presentation of Locke's theory of knowledge is lamentably imperfect owing to the omission of the chapters which deal with our "demonstrative" knowledge of the existence of God, and our "sensitive" knowledge of external nature. The sacrifice of the long extract from Condillac about the animated statue would probably make it possible to include all the additional matter for which I am pleading without materially increasing the bulk of the volume, and the student would be a considerable gainer by the exchange. Or, if still more space is needed, it might be got by omitting the odd score of pages from Bruno's *Cause, Principle, and One,* with which the book opens. The double omission would perhaps even make it possible to include the important pages of Galileo's *Saggiatore,* which may be regarded as the classical statement of seventeenth-century science on the distinction between primary and secondary qualities and the ideal of mechanical explanation.

A. E. Taylor.

The History of a Strange Case. By D. P. Abbott. Chicago: The Open Court Publishing Company, 1908. Pp. 50.

The Marvellous Creations of Joseffy. By D. P. Abbott. Chicago: The Open Court Publishing Company, 1908. Pp. 24. Illustrated.

Mr. Abbott is the author of a very useful and interesting little book entitled *Behind the Scenes with the Mediums,* which explains from personal knowledge and experience many of the most puzzling mediumistic 'phenomena'. In the first of the above-named pamphlets he reports a brief series of interviews with the 'trumpet medium,' Mrs. Blake. The observations to be accounted for are of two kinds, physical and mental.

The physical phenomena of light and heavy trumpet, floating trumpet and lights are of the ordinary 'trick' sort. The voices in the trumpet undoubtedly proceed from the medium's vocal organs and issue from her ear: Mr. Abbott suspects an abnormal Eustachian canal (presumably, a canal that is permanently open) and an opening in the neighbourhood of the tympanic membrane (presumably a rupture of the membrane itself). The mental phenomena of correct names, and other information furnished by the trumpet-voices, are tentatively referred to knowledge procured by the medium from 'Blue Book' or other outside sources.

Mr. Abbott concludes what is apparently a fair and impartial account with the words: "That I have not fully solved the problem does not prove that I could not have done so, had my opportunities been greater; or that others could not have done so". The reviewer inclines to agree, at any rate, with the first part of this statement. An abnormality of the Eustachian tube and an opening in the drumskin are matters that can be verified, if opportunity for verification is given; the analogy of the nasal whisper at once suggests itself. In the case of the 'mental phenomena,' the evidence of trickery can hardly be more than circumstantial: the result of sittings on the second day was markedly superior to that obtained on arrival, test-questions were often evaded, etc. It would, obviously, be a task of extreme difficulty to secure, at a first and single visit, conclusive proof of outside assistance; and it is a great deal to have discovered the mode of production of the voices. In an appended note on 'Unexplained Mystifications' Dr. Carus insists on this difficulty of detailed explanation, and points out that, in principle, the phenomena offer nothing new.

The second pamphlet describes some of the most striking performances of the professional 'magician' known as Joseffy. These are left unexplained, partly because Mr. Abbott cannot explain them, partly because he is bound to secrecy regarding them. The account is offered as "a lesson in credulity"; and the events described are, indeed, as uncannily impossible as one could wish.

P. E. WINTER.

The Philosophy of Kant Explained. By JOHN WATSON, M.A., LL.D. Glasgow: James Maclehose & Sons, 1908. Pp. vii., 515.

This volume is mainly devoted to the oral explanations that Prof. Watson was in the habit of giving on the successive paragraphs of his translations from Kant, the aim of these being to provide such a commentary on Kant's words as may at the same time furnish a fairly complete account of his philosophy. In addition, we have thirty-four pages of Supplementary Extracts from the *Critique of Judgment*, and an Historical Retrospect of the development from Descartes to Kant occupying thirty pages. All those engaged on the serious study of Kant either as teachers or taught must feel that it only remains to express their admiration and gratitude for this work. Prof. Watson has, with the slight exception of the Historical Retrospect, limited himself to exposition, but more lucid exposition or exposition better adjusted to its purpose it would be hard to find. This is a book that must be invaluable to so many that surely Prof. Watson may confidently look forward to receiving more than that measure of support he speaks of as necessary to encourage him to publish the promised sequel, which is to contain a discussion of Hegel's criticisms of Kant.

D. M.

The Psychology and Training of the Horse. By Count Eugenio Martinengo Cesaresco. London: T. Fisher Unwin. Pp. xvi., 334. Price 10s. 6d. net.

This is a volume of practical advice on the training of horses, both for ordinary purposes and for the exhibition of circus feats. The "psychology" makes no profession of scientific accuracy, but is quite adequate for its purpose. The author is an acute observer of horse-nature, and the book abounds in wise reflections upon the memory, ideas, fears, likes and dislikes, character and moral qualities of the horse. The methods of training presented are of the most humane description, adapted with great delicacy to the individuality, experience and circumstances of the different types of horse.

There is much that is of value for Comparative Psychology in the chapter (pp. 63-191) on "How the horse learns and how he must be taught". The Italians are famed trainers of horses; we have here the best of their methods, and the principles on which they are based.

J. L. McIntyre.

La Notion de la Vérité dans le Philosophie Nouvelle. J. de Tonquébec. Paris: Beauchesne et Cie, 1908. Pp. 149.

This is an excellent study of the idea of truth in the philosophy of M. Bergson, and his followers M. Wilbois and M. Leroy. Its statement is clear and temperate, and it is made exceedingly serviceable by full citations and references.

The author writes from a scholastic standpoint, supporting the definition *Veritas est adæquatio rei et intellectus*, which M. Leroy has picked out for attack. He therefore occupies a position of dualistic realism, accepting, with the new philosophy, an "intuition" prior to the judgment, but sustaining, against it, a distinction of being from knowledge within the intuition itself. Hence he rejects the assumption of the self-containedness of cognition, which the new philosophy shares, as he and it agree, with current idealism; while he concurs in the polemic by which it deduces from that assumption, as accepted by idealism, the ruin of the ordinary idealistic cognition-theory. This argument is contained in a section on "The Definition of Truth," which is in substance a defence of the conception of knowledge as the direct seizure of an object, against the notion of self-containedness, and is at the present juncture perhaps the most important thing in the book. A critic might ask, granting the direct seizure of an object in every act of knowledge, is not the object as seized self-contradictory, and therefore in need of rectification according to some further principle?

The section just referred to forms part of the author's criticism, which is preceded by a plain and just exposition of the new doctrine. Here is brought into relief its incompatibility with what we commonly mean by truth. Yet here too are set out certain characteristics which the theory ascribes to thought which is true, which are attractive to idealists, who in this point will differ from the author. These are such as self-containedness, vitality, fecundity, coherence and non-contradiction, the admission of differences of degree. In view of these, an *exégèse bénigne* is tempting, but, as the author shows, impossible. Clearly, for the new philosophy, truths are the transitory expressions of what is in itself unstable. Nothing is in principle persistent; truth is what serves the turn, so long as it serves. Even our supreme principles are acquired habits, which might be unlearned, though to unlearn them would take

time. The Law of Contradiction, *e.g.*, is necessary to-day, but only because we have previously willed it.

The critical chapter, in a section entitled "The Intuition and the Concept," at once raises the issue of what there is in common between the intuition which is reality and the explicit idea which is truth. Can it seriously be said that the latter is not a necessary development of the former? To put it in other words, is the so-called intuition the unanalysed datum below the concept, or the organised concrete experience above it; or is it, perhaps, a confusion between the two?

The author, though hampered as some will think by his acceptance of the intuition as prior to and independent of the judgment, answers on the whole that the organised concrete experience is the true intuition, and for this, he urges, you cannot dispense with the concept. But "En réalité, la philosophie nouvelle n'aborde point ce problème de fond" (the problem of the fundamental identity between concept and intuition). In Philosophy, it affirms, one might attain to "living" the real, though one cannot "conceive" it. What does "living" the real involve, and how at such a level dispense with conceiving it? The expression, 'to "live" the real,' seems, one may observe, to come straight from the hearts of Plato and Aristotle. *θεωρία* for both was the very pulse of living.[1]

Yet the criticism seems to be weakened by the contention, involved in the realistic attitude, that "the real has in it more and other than the idea"—a contention which the author's excellent vindication of the predicate of activity for the idea[2] in the later section on the Evolution of Truth, might be held in some degree to modify.

In addition to the three sections already referred to, the critical chapter includes discussions on the conception of Free Truth and on the Criterion of Success. The former, the author points out, is disposed of if we make *any* view of truth dependent on *any* view of reality, which the new philosophy certainly does. Of the latter, it is enough to say that it demands analysis, and involves an inferential transition. We *infer from* the good *to* the true.

The author, it should be said, sets a high value on 'évidence'—self-evidence, the *fulgor veritatis*, in the establishment of truth. This is part of his hostility to Idealism; but it places him at a certain disadvantage in face of the philosophy he is attacking, which sometimes appropriates the language of idealistic logic with reference to system and self-coherence.

M. de Tonquébec has remarked that the radical defect of the new philosophy lies in its inadequate notion of an idea (p. 121). No doubt he is right. But might we not with equal justice begin at the other end, and say that it lies in the inadequate conception of "life"?

B. B.

Évolutionnisme et Platonisme : Mélanges d'Histoire de la Philosophie et d'Histoire des Sciences. Par René Berthelot. Paris : Félix Alcan, 1908. Pp. iv., 326. 5 fr.

M. Berthelot claims for his book that if it does not possess systematic unity, it at least exhibits throughout all the parts of which it is composed a community of tendency and aspiration. This is at once evolutionary

[1] And "life" in *Évolution Créatrice*, 214, 217, 323, seems *en revanche* to culminate in *θεωρία*. *Voir, pour voir*, is our highest life. Have we not here a different shade of thought from English Pragmatism?

[2] "L'idée n'est donc pas ce fragment inerte qui roulerait détaché dans le courant de la vie mentale. Elle-même fait partie du courant" (p. 122).

and rationalistic, and aims at preserving a balance between the doctrines of Darwin and Spencer on the one hand, and of Guyau, Nietzsche and Bergson on the other. The book is made up of certain Discussions reprinted from the *Bulletin de la Société Française de Philosophie* and articles from other publications. Although its various items have thus already appeared in one shape or another, one is very glad to have them collected into what is certainly an extremely interesting book. As it professes, its main value is historical, and that value is considerable. One is reminded in it, for example, how much more continuous and considerable the influence of Schelling has been than is usually believed, as we see it filtering down through Coleridge to Spencer, and through Guyau and Ravaisson to Bergson. Other points of historical interest discussed are the connexion between the views of Nietzsche and Bergson regarding the *rôles* of intelligence and intuition; the influence of Spencer on Nietzsche, and of Hegel on the Psychology of Bergson (p. 193) and on the Logic of Russell (p. 197). Altogether, in fulness of historical exposition, and in suggestiveness of historical detail and reference, lie the main merit of the book. The titles of some of the articles may be mentioned: "Le Darwinisme n'est pas l'evolutionnisme"; "Les origines de la philosophie de Spencer"; "Sur l'idée de vie chez Guyau, chez Nietzsche et chez Bergson," which aim at showing that the idea of evolution is not invincibly bound up with the system of Spencer or with a romantic vitalism like that of Bergson. The author's exposition of his own system of compromise is found in "Platonisme et Evolutionnisme". Like most compromises it strikes one as weak. To my mind the best of the remaining articles is the long paper, "Sur le sens de la philosophie de Hegel," which, apart from its own merits, had the additional one of having elicited the profound criticisms of Prof. Boutroux by which it is followed. In it M. Berthelot attempts to prove that Hegel endeavoured to subordinate Romanticism to an Idealism of Platonic inspiration, and maintains the startling theory that Hegelianism is not *Panlogism*. As against this I quite agree with Prof. Boutroux that Hegelianism may not be a Panlogism of *Gesetz* or *Verstand*, but that it is a Panlogism if we have regard to the character of the *Vernunft* which is its motive force. There can be no reasonable doubt that it is an absolute rationalism which eliminates individuality as valueless in itself, and that its much vaunted Liberty of the Spirit was nothing more than the metaphysically mechanical deduction of an edifice of concepts from antinomies posited by the abstract understanding.

D. M.

Die Stoa. Paul Barth. Zweite, durchgesehene und sehr erweiterte Auflage. (Frohmanns Klassiker der Philosophie xvi.) Stuttgart, 1908. Pp. 312.

Herr Barth's work, in its present enlarged form, provides an admirable summary of what is known about the history and doctrine of the Stoic school, with abundant references to the original authorities, as well as a very interesting account of the influence of Stoicism on later thought (Philo, Plotinus, the early Christian apologists, Clement, Origen, Augustine, the Florentine Academy, the seventeenth-century publicists and champions of "natural religion," the eighteenth-century philosophers). The writer is particularly careful to utilise all notices which throw light upon the internal developments of doctrine within the Stoa itself, and deserves particular commendation for the way in which he has realised the historical importance of Posidonius for the student of Roman

Stoicism. With his general presentation of the Stoic doctrine I find myself in pretty close agreement. I do not, however, understand why he should suppose καταληπτικὴ φαντασία to mean *greifbare Vorstellung*, and thus, in the end, make the Stoic doctrine of the criterium into an appeal to the supposed special objectivity of our experiences of touch. Surely καταληπτικὴ φαντασία simply means a presentation which "lays hold of" external reality, or if you like to press the juristic metaphor which lies at the bottom of a good many of the derived meanings of καταλαμβάνω, "convicts" the reality of being present. That the adjective was understood in an active sense seems to me to be shown by the sceptical counter-watchword, οὐ καταλαμβάνω. The chief defect noticeable in the book is that the author appears to be imperfectly versed in the Greek philosophy of the fourth century, and in consequence is apt to misconceive the relation of Stoicism to Plato and Aristotle and their predecessors. Thus the physical tenets ascribed on p. 39 to Zeno, apparently as original, really go back to Xenophanes, and perhaps to Anaximander. It is at least very questionable (p. 40) whether Plato ought to be classed with Aristotle as a believer in the "eternity of the world". The "allegorical" interpretations of the Greek myths surely may be traced beyond Antisthenes to Prodicus and to the Homeric allegorists (p. 49). The remark (p. 65) that the Stoics laid more stress on God's omnipotence than Aristotle would be quite misleading in its suggestions to a reader who did not know that Aristotle expressly denies all "production" to God. Cleanthes can hardly have been thinking of Epicurus when he cursed him who *first* severed justice from utility (p. 135). Thrasymachus and Callicles in Plato had made the separation long before, and so, for the matter of that, had the author of the "Delian inscription" denounced by Aristotle. It is a more serious error when the Stoics are treated of as though they had been the first school to give more than a grudging recognition to the conative aspect of mental life (pp. 158-61). Plato, who is treated by our author, in accord with an absurd prejudice, as a mere "intellectualist," was as well aware as any philosopher who has ever lived of the presence of an irrational element in the soul, and knew quite well that it is to habituation and not to instruction that we have to resort in the early stages of moral education. It is amazing that any one who has ever read the *Republic* should assert that "the beginning of virtue" according to Plato is a "purely intellectual attitude," or regard as a Stoic discovery the doctrine that "teaching alone cannot overcome the resistance of the will" to the moral law, or think that Plato proposed to inspire his "guardians" with courage by mere appeals to *Vorstellungen* apart from physical discipline. What is still odder is that Herr Barth, who repeatedly calls will the "irrational" and "blind" element in human nature, should single out for special commendation the one prominent school of Greek philosophers who flatly refused to recognise the presence of an "irrational part" in the soul. Nor do I understand how the author has been led to the remarkable conclusion (p. 33) that "Plato found happiness primarily in knowledge, Aristotle in knowledge as well as in action". I would also ask on what he bases his statement that "*Plato and* Aristotle believed that many peoples are destined by nature for slavery" (p. 191). In one passage, at least, Plato expressly rejects the division of mankind into Hellenes and "barbarians" (as we might say into "white men" and "inferior races") as arbitrary, and it is significant that the industrial life in his *Republic* is assigned entirely to free citizens. On the other hand Plato hardly deserves the credit bestowed on him at p. 193 for the maxim that we punish with a view to the future and not to the past. It is not Plato but Plato's Protagoras who makes the assertion, which is presumably put into his mouth because the real Protagoras actually held

something of the kind. Plato's own views on punishment, as we can gather them from various dialogues, are scarcely so simple.

I think Herr Barth also goes too far in the latter part of his work in detecting direct Stoic influence wherever an author's language resembles that of the school. The fact that Euclid called his axioms *κοιναὶ ἔννοιαι* seems hardly sufficient ground for saying that "the famous Euclid was a Stoic" (p. 206). Of itself it only proves that the expression *κοιναὶ ἔννοιαι* had passed into current usage, exactly as many of the terms used by Locke or Hume have become commonly current in English. So, too, it is unnecessary to trace back to the Stoa the belief of the early Christian apologists and theologians in Providence. The Scriptures alone, to say nothing of Platonism, would equally well supply them with grounds for their conviction. (By the way, what can be the meaning of the curious statement, which occurs in the account of Origen, at p. 262, that Plato's God was *räumlich begrenzt?*) Still, when allowance has been made for all these deficiencies, Herr Barth's volume remains a valuable addition to the excellent series in which it appears.

A. E. Taylor.

Gesammelte Werke von A. Spir, Band I. Denken und Wirklichkeit, Versuch einer Erneuerung der kritischen Philosophie. Vierte Auflage, mit Titelbild nebst einer Skizze über des Autors Leben und Lehre, von Helene Claparède-Spir. Leipzig: Verlag von Johann Ambrosius Barth, 1908. Pp. xxx., 548.

The present reissue of Spir's *Thought and Reality* constitutes the first volume of a generously planned edition of his works. There is a portrait, and the book is prefaced by an adequate, though very brief, sketch of his life and doctrine from the hand of his daughter. The note struck in Spir's life is that of isolation. Whether as the lad in a Russian naval school reading Kant—Spir fought at Sebastopol—or as the student *Hospitant* in German universities, or in later years curbed by 'the bridle of Theages' in Lausanne and Geneva, African Spir was in each of the countries, actual or ideal, of his allegiance an alien of the spirit. Hence the neglect of him in his own generation. In ours it is the uniqueness of the outlook safeguarded by this aloofness that seems likely to lead to Spir coming by his own.

Spir's system was evolved so early as the opening seventies, and there are marks of date in the present book. Nowadays, for instance, the emphasis in the discussion of such topics as scientific atomism and the Darwinian theory would fall quite otherwise. The drybones of Mill's logic—on the judgment, *e.g.*—would bulk less large, and what was left of them would find different treatment. A psychology of the will basing itself upon Mill's Examination of Hamilton would perhaps fail to be regarded as altogether adequate to-day. But, even in fundamentals, the bringing of Kant as read in the light of Herbart to bear upon the empiricism of Mill and Lewes and Spencer is only intelligible at a given date. English students may well be grateful to Spir for the deep-probing criticisms of Mill which betray such complete knowledge of all that Mill wrote, but they do mark limitations of time and circumstance.

Yet Spir's central philosophical theory is not to be lightly dismissed as the manifest result of the reading of just these books in chance conjunction with the reading of just those. Without Herbart and without Mill Spir's philosophy would not be what it is. But his outlook is not a mere blending of these two influences. He is no realist and pluralist with the one, no empiricist with the other. His point of view is one that

few will take perhaps, but it is at least altogether his own. Spir not only saw no other man's rainbow, he could not even think it.

Spir's philosophy is more difficult in summary than in detail. Distinguishing thought wholly from the objects of thought, and emphasising its difference from sense as one of kind, we get a cleavage between the given of experience and the *a priori*. On the one hand is the changing phantasmagoria of sense. On the other the principle of identity and the law of contradiction. It is in the dissidence of the two—in the failure of experience to satisfy the demand for a self-subsistent and self-identical absolute, in the inability of the unconditioned to find expression in the sphere of change—that the philosophic problem and the clue to its solution emerge. The absolute is not the ground of explanation of the given, not its sum, nor that from which it may be deduced. It is the norm from which the given diverges. The rift between the two, the *abnormity* of experience, is the fact in the light of which the meaning of the illusory external world is to be grasped. Things and selves are complexes of sense-impressions. Things and selves we regard and cannot but regard as substances, *i.e.*, as self-subsistent and unchanging identities. Hence the contradiction of that contrivance of nature's artistry which we call the outer world. This is unreal, but it is the natural and necessary illusion which the whole fabric of science presupposes, and which science within the limits of its own purposes is right in presupposing. Philosophy, however, in bringing us to recognise the world of persons and things as organised illusion forces us back upon the norm which is unchanging.

The conception of the self-identical or absolute unsatisfied by experience which fails to conform to the norm but yet can only be manipulated on the assumption of the norm, as the rational background to induction, belongs to a level of speculation where the atmosphere is something rarefied. The formula of a *Natur-einrichtung* to explain the illusion of externality is obscure. Spir is more intelligible to the plain man when he is criticising a definite view of one of his predecessors, *e.g.*, Kant's treatment of time and space as in all respects on a par; developing a definite species of the norm or corollary from it—when for example having insisted that the self-identical or unconditioned can have nothing to do with change, he infers to the law of universal causation in the form that all change is conditioned, and by something itself conditioned, indeed by previous change; or applying results of his theory, as, for instance, in explanation of our knowledge of other selves, or in deprecation of individualism. The book abounds in subtlety and suggestiveness of this kind for those of us who reject our author's supreme paradox.

HERBERT W. BLUNT.

Geschichte der Autobiographie. Erster Band: *Das Altertum.* Von GEORG MISCH. Leipzig and Berlin: B. G. Teubner, 1907. Pp. vii., 472. M. 8.

This work was elicited by the theme of the *History of Autobiography* proposed by the Prussian Academy of Sciences in 1900. The author is to bring the subject down to modern times with another two volumes. In the present volume, after briefly noticing the schematic and external forms of autobiography found in Babylonian and Egyptian inscriptions, Herr Misch marks the real beginning of this genre of composition with the real discovery of individuality made by Greece, and considers it, from its first utterance in Hesiod, through its expression in political, rhetorical and romantic writings, until inner experience reaches in Marcus Aurelius

a new form of expression, the most adequate of which the old culture was capable, and the new wine of Christianity broke through the classical restrictions and gave us the mysticism and lyricism of Gregory of Nazianzus, and led Augustine, out of his view of the world and his experience of conversion, to create a great and original autobiographical form. He considers the plastic fancy and logical method of classical autobiography, the desire to present the constant nature in fully developed man, "that which was first by Nature," as inadequate to represent the infinite process and uniqueness of individuality. The work deserves to be noticed, not only for its value as a *Sammelwerk* but also for its own merits. It has called for scholarship, patient research and clear guiding ideas, and Herr Misch has these.

D. M.

Giordano Bruno, Opere Italiane: I. *Dialoghi Metafisici.* Edited by Giovanni Gentile, 1907. Pp. xxii., 420. L. 6.00.
II. *Dialoghi Morali.* Edited by the same. (Classici della Filosofia Moderna.) Bari: Laterza e Figli, 1908. Pp. xx., 512. L. 7.00.
2. *Giordano Bruno nella Storia della Cultura.* G. Gentile. Milano, etc.: Remo Sandron, 1907. Pp. 48.
3. *La Filosofia di Giordano Bruno.* Erminio Troilo. Torino: Fratelli Bocca, 1907. Pp. 162. L. 3.

Bruno has been for many years recognised as the greatest and most original philosopher Italy has produced: it is curious that no edition that might be called popular, even of his Italian works, has hitherto been published. The originals were so rare that, so late as the beginning of the nineteenth century, scholars and historians passed them from hand to hand. Wagner's edition, containing all the Italian works, was published in 1830; useful as it was, it contained many errors; yet, as Gentile tells us, it was already out of print in 1834. Not till 1889 was a further complete edition of the Italian works printed, that of the Orientalist Lagarde, who aimed at an accurate reproduction not merely of the words but also of the peculiar and varied orthography, punctuation and grammar of Bruno. Gentile points out that this fidelity is merely a hindrance to the modern student, whose interest is in Bruno's philosophy, not in his spelling. He has accordingly printed Bruno in modern form, while retaining all that is characteristic of his style.

As the titles show, the volumes contain the philosophical works only; the *Candelaio* is therefore omitted. The paging of the three previous editions,—the original, that of Wagner, and that of Lagarde,—is given at the foot of each page of Gentile, so that all divergencies may be traced, and all corrections judged on their merits. There are no changes of any significance from Lagarde, except in typography. The second volume presents (pp. xvi to xix) an earlier and briefer offprint of the first five pages of the *Cena*, discovered in an edition that is now in the Bibliotheca Nazionale of Naples. It contains nothing that is omitted, and omits nothing of importance that is contained in the later copy, unless some of the witticisms of Frulla, and the amorous invocation to the graces of England be so considered. Frulla, however, was in the original draft described as a servant of "Smith," the interlocutor whose identity has worried the commentators. The present reviewer has suggested he might be the poet William Smith, one of Spenser's circle; but it appears (Gentile, i., p. 415) he was an unromantic John Smith, who had engaged the philosopher to teach him Italian, the then fashionable language of the English court.

Gentile's notes are brief, and confined to the necessary interpretation of the many historical and philological references in Bruno. Much valuable light is thrown on the sources of Bruno's inspiration in the Ethical Dialogues. There are additional notes at the end of each volume, and a useful index in the second. In all respects this edition seems to meet the need for a convenient and readable reprint of the ardent pioneer apostle of modern philosophy.

2. What were the real causes that led to the condemnation and death of Bruno? This is the question discussed by Gentile in the small volume on "Bruno in the History of Civilisation". The answer is sought (1) in the ideas of Bruno upon the relation between Philosophy and Religion, (2) in his attitude towards the Reformation and towards the Inquisition. It is shown that throughout his life, and up to the very eve of his execution, Bruno held firmly to the distinction between Religion as the sphere of revelation and Philosophy as that of rational Knowledge; the instrument of the one being *faith;* of the other, *experience* and *reason;* the end or aim of the former was practical,—happiness or the blessed life; that of the latter theoretical,—the discovery of truth. It was impossible for the two to conflict, since they differed alike in their sources, in their methods and in their goals. Bruno was willing to accept the theology of the Church, provided he was granted absolute liberty in his philosophy. That however was a progressive step which Bellarmino and his fellow Inquisitors were by no means prepared to make. They required that Bruno should not merely repent his errors of faith and practice (which he willingly did) but should also recant and reject the new philosophical and scientific truths which he claimed to teach. Bruno refused; he died therefore a martyr not for any religious dogma or practice but for the freedom of thought and of scientific research. It is the justification on Bruno's behalf of this title that Gentile eloquently submits in the volume before us, and he rightly protests against such exploitation of Bruno's name by political parties, of whatever colour, as has frequently occurred in Italy. Bruno was essentially a mystic (pp. 11-19); his interests lay entirely outside of the practical, social life of the Church. The reforming Churches, whether Calvinist, Lutheran, or Anglican, found him equally cool,—ready to conform to their external ceremonies, in return for liberty to write and teach his own philosophy. It was in the vain pursuit of this liberty that he travelled from country to country, from city to city of Europe. No doubt there was a large element of intellectual pride in his contempt alike for the plebeians and for the dogmas which seemed to him required only as a bridle upon their vulgar passions. No doubt also the distinction between faith and reason, between revealed and empirical truth could not be final, but in the circumstances of the time, under the persecuting spirit that animated Reformers and Orthodox alike, it was the one hope of Scientific thought; and Bruno contributed both by his writings and by his death to the realisation for others of the liberty he sought in vain for himself. On the other hand, Bruno was far removed from the Atheist or Secularist which some travesties of his teaching depict; he found God not merely in the externals of ceremony and of historical revelation, but in all that is, the world about us and the world within us, in the truths of science, in the ideals of art and of conduct; the ultimate source and aim of all moral aspiration and all social evolution.

3. The author of the work on "the Philosophy of Bruno" has already written several volumes on the Theory of Knowledge and other subjects; his style is somewhat grandiose, his periods involved, his thought vague and "insaisissable". The principal aim of his book appears to be to prove that Bruno was "antimetaphysical" in his philosophical tendency, that however frequent the term may be in his works, the "substance, the

soul of metaphysics, as well as that of theology, is absent". To most readers of Bruno this will seem absurd, except in a very peculiar interpretation of the term "Metaphysics"; it will be seen above that Gentile calls the first three of the Italian works the "Metaphysical Dialogues," and most will regard the name as appropriate. Troilo however finds in all definitions of Metaphysics the cloven hoof of Dualism—"double aspects of enigmas, double orders of problems, double forms, and double laws, the natural and supernatural, contingent and transcendent, human and divine". Bruno was certainly no dualist in his main conception of Nature and of God, but he would have been the first to regard his idea of the immanence of the Absolute in the Appearance, of God in Nature, as a metaphysical doctrine. Troilo would reduce all philosophy apparently to the Theory of Knowledge on the one hand and the Philosophy of Nature on the other: Bruno's contribution being mainly towards the latter, in his great principle of the living and infinite unity of all things, at once the source and the end of the evolution of Nature and man. The discussion is mainly about a word, but Troilo gives in general an accurate and vivid presentation of Bruno's system.

J. L. McIntyre.

La Filosofia dell' Azione. Da Giovanni Cesca. (Biblioteca 'Sandron' di Scienze e Lettere.) Milan, Palermo and Naples (no date). Pp. 328.

By action Prof. Cesca means the intentional alteration of reality; and by its philosophy he means a study of the conditions that make human action possible and efficacious (p. 296). Furthermore it must be directed towards the improvement of what is; which, again, he explains to be the tendency to make individual and social life more human and more moral (p. 93). Altruism and civilisation are frequently impressed on us as ends to be kept in view; and constant subordination to social duty, expressed under the form of the moral law, is also recommended. But, what seems a grave deficiency in so ambitious a work, morality is throughout rather assumed than proved. From the philosophical affinities of the writer one might expect to find him the adherent of Universalistic Hedonism; but it would appear that he had never heard of such a doctrine. According to him the great error of the utilitarians and Hedonists was their refusal to see anything in man but the mere instinct of self-preservation, whence they regarded him as simply egoistic—a rather belated view after all that Schopenhauer, Mill, Spencer, and Sidgwick have written on the subject. In this connexion it may be noticed that Prof. Cesca treats the instinct of propagation as the original source of altruism; which, so far as the males of our species are concerned, is doing it far too much honour.

In default of a more precise definition we have to content ourselves with the information that 'the principal end of man's activity is to rule over Nature and direct her forces to his advantage (favore)'. But this seems a confusion of means with ends. For it is not mentioned in what man's advantage consists. An Aristotle would have valued every extension of our control over the forces of Nature only in so far as it made the theoretic life easier and more lasting than before. A Nietzsche would have valued it merely as a new instrument of despotism in the hands of superhuman genius. Neither of these ideals has the approval of our author. 'The whole importance and value of knowledge,' he tells us, 'is derived from its having a practical end in view' (p. 315); while by a remarkable inconsistency he admits on the next page that 'the great conquests of Science are due to the disinterested desire for know-

ledge'. And the last words of his book speak of the control over Nature as an indispensable condition for the promotion of happiness—without any more precise specification of what happiness means.

A more appropriate title for the present volume would perhaps have been *True and False Idealisms*. True idealisms, according to Prof. Cesca, are those which, remaining faithful to reality, supply human action with the highest aims. They assume three forms: Art, Religion, and Philosophy. Except where it counts as a moral influence, Art would seem to be more properly co-ordinated with practice, as Aristotle taught, than included as one of its divisions. Nor is it good method to give Religion the place it occupies here, when all reality is denied to the divine objects with which it has hitherto been associated. Our author identifies religious emotion with the purest and most exalted form of love, but shows no reason for treating it as anything more than a department of ethical culture. The ideal of Philosophy has been already indicated. It consists in so organising the whole of experience as to promote the development of humanity.

The chapters on False Idealism include more than a third of the work, forming its most interesting and valuable portion. Prof. Cesca passes in review and severely criticises the various metaphysical and neo-theological theories which, in his opinion, are calculated to weaken our hold on reality and thus to undermine the foundations of practice. From this point of view the subjective idealism which limits man to the knowledge of his own states of consciousness, and the so-called Rationalism which professes to explain the nature of things in themselves are equally condemned as misleading illusions. As against these our author holds to the old philosophy that knowledge is limited to phenomena, with the single exception that phenomena are known to be the manifestation of things in themselves. But like many other agnostics he is not consistent with himself. For, to begin with, things in themselves are causes, and as such fall into a category of objects about which something is known. 'Causes are antecedents' (p. 195), and therefore must exist in time. Furthermore 'it is unintelligible that the factors of the phenomenon should be of a nature essentially opposed to their sensible manifestations' (p. 196). Better still, 'sensible qualities are an index of the intimate structure of things' (pp. 193-94). Phenomena are 'the products of an objective and a subjective factor' (p. 174); but there is good reason for thinking that these two (elsewhere described as nature and spirit) are not an antithetical couple, if indeed they are not closely akin (p. 241). Such concessions bring us in sight of a monistic philosophy.

Prof. Cesca is more sure of his ground when engaged in the congenial task of dissecting the various methods of irrationalism, so sedulously worked by theological apologists from Newman to our own day, for the rehabilitation of traditional beliefs. The handling of Pragmatism alone is somewhat less thorough than could be wished.

Our author exhibits so many points of contact with Comte's philosophy that one wonders why he does not frankly describe himself as a Positivist. As it happens he prefers the name of Humanism for his system, claiming to have introduced that term so long ago as 1894, and charging Prof. Troiano with having appropriated it as the title of a work published in 1907, which is described as embodying without acknowledgment nearly the whole of his teaching (p. 294). I have not read Troiano's book; but it seems perfectly possible that his ideas were borrowed directly from Comte, whose Religion of Humanity may well have suggested a name so closely akin to it both in sound and sense.

A. W. Benn.

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VIII.—PHILOSOPHICAL PERIODICALS.

Philosophical Review. Vol. xvii., No. 5. **J. Seth.** 'The Alleged Fallacies in Mill's "Utilitarianism".' [Acquits Mill of the charge of various logical fallacies: as of composition, in his proof of the principle of utility; of figure of speech, in his use of the term 'desirable'; of irrelevancy, in his treatment of motives; of contradiction, in his acceptance of psychological hedonism; of confusion, in his doctrine of the qualitative distinction between pleasures. As regards the two last points, "Mill was not concerned . . . with the deeper ethical question which we cannot help raising. His entire argument is dominated by the practical purpose which inspires the essay."] **W. Fite.** 'The Agent and the Observer.' [The observer's view is mechanical, visually descriptive; the observer's is logical and teleological, anthropomorphic and automorphic, couched in terms predominantly of organic and muscular contents. The author shows the importance and the consequences of the distinction within descriptive psychology, and indicates the partiality, inadequacy and abstractness of each view taken alone. In particular, the observer's view involves both exclusion and distortion; witness the conceptions of humanity offered by the social sciences.] **E. H. Hollands.** 'Neo-Realism and Idealism.' [The epistemology of neo-realism rejects the representative theory of knowledge: it thus parts company with the older realism, and finds itself in agreement with objective idealism. But it holds, also, that knowledge makes no difference to the facts which are known: here it conflicts with objective idealism. Negatively, however, its criticism is aimed almost exclusively at subjectivism; positively, it is committed to a procedure which starts with reals and tries to arrive at relations of reals. In other words, it has not met objective idealism in the field of controversy, and its constructive effort lags behind that of objective idealism as a statement, not a solution, of the metaphysical problem.] **W. K. Wright.** 'Happiness as an Ethical Postulate.' [There is a peculiar mental experience which attends moral action, partly cognitive and partly affective. "In its affective aspect, it is pleasurable because self-consciousness is unimpeded in its contemplation of the moral worth of its action. It is cognitive because the ends striven for are . . . cognised. The experience . . . represents the highest satisfaction that a moral man can experience,—it is happiness." In this sense happiness, as an ethical postulate, becomes morally significant and finds psychological support.] Reviews of Books. Notices of New Books. Summaries of Articles. Notes.

Psychological Review. Vol. xv., No. 3. **H. Carr.** 'Voluntary Control of the Distance Location of the Visual Field.' [Among 350 students the writer has discovered five new cases of voluntary control of the visual field; he gives notes upon these, supplementary to the account in vol. xiii., no. 4. The effective criterion of depth for the new type may be termed a 'central factor,' since it is susceptible to

volition, and implies no detectable sensory adjustments; it may be considered as consisting of motor impulses normally involving or accompanying adjustments to distance. The illusion is not confined to moments of monocular vision.] 'On Meaning: a Symposium before the Western Philosophical Association, December, 1907.' **W. B. Pillsbury.** 'I. Meaning and Image.' [Ordinarily, image is taken to be the primary process, and meaning is either derived from it or made a second ultimate. Really, meaning is the primary process in concrete consciousness, and image is but a certain kind of meaning. Meaning is a co-ordination, an interrelation between sensation, idea and earlier experience, controlled or represented by the purpose of the moment; it implies a sensory content associated with a vast number of other sensory and motor elements, dominated by still other and more remote nervous processes. Image is the psychologist's construction, set up to explain mental operations.] **S. Colvin.** 'II. The Nature of the Mental Image.' [We cannot usefully distinguish the image epistemologically, in terms of reality, or physiologically, in terms of the seat of the aroused processes. Introspection also breaks down, since some psychologists make image and sensation fundamentally the same, while others find a qualitative difference. Imagination is best defined as that activity of consciousness in which an object of sensation is experienced as not immediately present to the senses. The reaction to perception is prompt and definite, while the reaction to image, though it must be made, may be postponed.] **T. L. Bolton.** 'III. Meaning as Adjustment.' [It is the attitude of the experiencing subject that gives meaning to the object; perception arises through a reaction that is characteristic of the object perceived. The meaning is, however, never complete or exhausted, since it is contained only partly in the adjustment that has taken place, and partly in other reactions that are about to take place. This incompleteness is a general character of consciousness.] **J. E. Boodin.** 'IV. Truth and Meaning.' [Meaning in its essential aspect is intent; imagery is means or by-play. Truth is one species of meaning. Its criterion is not usefulness, or even (without qualification) satisfaction; for this is only a coefficient of the terminating of an idea in a certain reality which it intends or suspects. The test of truth is the agreement of idea or belief with its reality: formal, as of idea with idea in formal reasoning; or material, as of idea with facts of a perceptual and individual kind in concrete truth. Truth must agree with the future; individual and social selection are subject to cosmical selection.] **J. M. Baldwin.** 'Knowledge and Imagination.' [Discusses the difference between the semblant or imaginative and the actual or truthful meaning, and the parts that they play in the upward movement of knowledge. Every cognitive content must have both renderings; belief motives make-believe and make-believe engenders belief. The instrumental meaning is a personal and imaginative re-reading of an actual or truthful meaning, and the truthful meaning is a common and actual re-reading of an imaginative personal construction. What, then, is the end of imagination? It may be theoretical, the true, or practical, the good; or it may be æsthetic or intrinsic, the real *par excellence*. As the self-reality of inner and the thing-reality of outer control get apart in the development of experience as cognitive, so do they come together in the æsthetic mode. This æsthetic mode of realising has the only meaning that can be called in any intelligible sense absolute.] Discussion. **F. C. French.** 'Group Self-Consciousness: a Stage in the Evolution of Mind.' [Between the objective consciousness of the animals and the individual self-consciousness of man stands, genetically, the group self-consciousness of the tribe or community.]

American Journal of Psychology. Vol. xix., No. 3. **E. Murray.** 'A Qualitative Analysis of Tickling: Its Relation to Cutaneous and Organic Sensation.' [The first part of the paper reports a careful introspective analysis of the pressure quality, and concludes that Goldscheider's granular pressure is a complex: the elementary tactual quality is 'contact-brightness,' and the dull substrate of the Goldscheider pressure is a secondary and probably a non-cutaneous factor. The second part is devoted to a similar analysis of tickling, and concludes that tickling is "an intensely vivid complex of unsteady, ill-localised and ill-analysed sensation, with attention distributed over the immediate sensory contents, and the concomitant sensations reflexly evoked". The sensory basis of the experience is contact-brightness; but in actual experience tickling differs from the ordinary contact-complex as 'feeling' from perception. A 'feeling' (as here defined) is a coherent and persistent mass of sensory elements, unanalysed and but roughly localised, which has an intrinsic claim on the attention and is distinguished by peculiar vividness and strong dynamogenic value; the tickle-experience, in particular, is a form of the 'feeling' of excitement.] **F. L. Wells.** 'A Neglected Measure of Fatigue.' [Discusses the use of the tapping-test (maximal rate of repeated voluntary movements), in the light of the requirements of a reliable measure of fatigue, and in comparison with Kraepelin's addition-test, ergographic tests of force of movement, etc.] **J. Bascom.** 'Laurens Perseus Hickok.' [General review and appreciation of Hickok's work in psychology and philosophy.] **E. L. Thorndike.** 'The Effect of Practice in the Case of a Purely Intellectual Function.' [Report of experiments on the mental multiplication of one three-place number by another. The rapid and marked improvement by practice throws additional doubt on the general influence of any form of specific practice. Individual difference in the changes of rate of improvement is, probably, due not only to the operation of one identical law modified by difference in conditions, but also to the action of radically different laws, operating on different individuals according to the different physiological changes in them which underlie improvement. Greater original capacity apparently gains as much as (or more than) lesser capacity from the same environmental training; and capacity to improve more quickly to a small degree probably means capacity to improve to a higher degree under the maximum of efficient training.] **W. H. Burnham.** 'The Problem of Fatigue.' [Review of recent work upon fatigue, and formulation of outstanding problems: *e.g.*, the central or peripheral character of fatigue from neuro-muscular activity; the relative resistance of nerve-centre and periphery; the range of individual variability in power of work, resistance to fatigue, etc.; the discovery of a practical test of the psycho-physical condition of the individual, available for teacher and physician.] Psychological Literature. Book Notes.

International Journal of Ethics. Vol. xix., No. 1. October, 1908. **A. W. Benn.** 'The Morals of an Immoralist—Friedrich Nietzsche.' [An interesting account of the development and relations of Nietzsche's ethics. The subject is here treated up to the emergence of the doctrine of the superman, and is to be concluded in a second paper. The genesis of the idea of the superman is connected with the influence on Nietzsche of Spencer's doctrine of evolution.] **T. Davidson.** 'Savonarola.' [He attempted the impossible task of reconciling political freedom with negation of the moral autonomy of man. His work failed because he sought the principles, whereby to guide society to salvation, in an external authority, instead of in the divine spirit of man himself.] **F. Melian Stawell.** 'The Modern Conception of Justice.' [It is charac-

terised, first, by a growing distrust of punishment of the individual as the only remedial force; secondly, by the recognition of the worth of suffering that is not punitive but unmerited, and of reward that is not individual only, but constitutes a common good.] **J. B. Baillie.** 'The Dramatic and Ethical Elements of Experience.' [Finds the essential character of a dramatic situation in the invasion of the moral life and purposes of an individual by factors that are non-moral, but which are inseparable from morality itself and form its co-element in human experience. The distinction between its two forms, tragedy and comedy, depends on the permanency or temporariness of the conflict, *i.e.*, on whether the reconciliation remains a demand or is actually brought about by the course of events.] **C. W. Super.** 'Ethics and Law.' [Directed against the statement that in the progressive alteration of laws the appeal is from law to ethical principles. Contends that, while ethics deals with personal virtue and motive, legislation is concerned with the promotion of justice without taking account of these, or even with affairs which have nothing to do with justice and are only matters of expediency. Ethical progress and legislation do not keep pace with each other.] **W. M. Salter.** 'A New Type of Naturalism—Montgomery.' ["Parts company equally with materialism and with current idealism. The peculiarity and originality of his way of thinking lies in his use and interpretation of biological facts." All motion, being reaction, is in a sense *creation*—the realisation of inherent potencies. "All we call material is idealistic in nature, *i.e.*, is conscious experience, actual or imagined." But conscious experience is not self contained or self-explicable; it implies "an extra-conscious reality, both without and within man". Montgomery's work is not receiving the attention it deserves.] Book Reviews.

Journal of Philosophy, Psychology and Scientific Methods. v., 8. **C. H. Johnston.** 'Ribot's Theory of the Passions.' [Almost wholly an analysis.] **S. Smith.** 'The Threshold of Rectified Perception as a Clinical Test.' [Statistics, with a new figure illusion.] **W. P. Montague.** 'Consciousness and Relativity.' [A reply to B. H. Bode's criticism in v., 6, of a paper in iv., 14. It does not, however, attempt to meet the objection that 'panobjectivism' resolves itself into Berkeleyanism.] **R. S. Woodworth.** Report on a meeting of the New York Academy of Sciences. v., 9. **J. E. Boodin.** 'Consciousness and Reality: II. Consciousness and its Implications.' [Consciousness makes only one difference to reality, that of awareness.] **R. W. Sellars.** 'Consciousness and Conservation.' [Attempts to 'mediate' between materialism and panpsychism.] **L. P. Boggs.** 'The Question in the Learning Process.' [The general theory of teaching is "find out what the child wants to know, and help him to learn it".] v., 10. **G. A. Coe.** 'Religious Value.' ["Ethical value and religious value are of the same kind, but one climbs only part way up the ladder which the other essays to mount to the very top."] **C. A. Strong.** 'Pragmatism and its Definition of Truth.' [Accepts it as an account of 'objective reference' and of 'why we think things true,' but not as 'a theory of what truth means'. For, as historical illustrations show, "truth consists rather in the potentiality of the consequences than in their actual occurrence".] **A. H. Pierce.** 'The Subconscious Again.' [Reply to Prince in v., 3.] v., 11. **T. L. Bolton.** 'A Genetic Study of Make-Believe.' [A pragmatic account of children's games, etc., pointing out their value in making reality more palatable.] **A. Schinz.** 'Jules de Gaultier's Theory of the Scientific Principles of Ethics.' **H. M. Kallen.** 'The Pragmatic Notion of ὕλη.' [Reply to A. R. Gifford in v., 4, who has (1) confused indeter-

minate and indeterminable, (2) assumes that A to become B must already be B 'unrealised,' and (3) construes 'system' in a non-pragmatic way.] v., 12. **G. Vailati.** 'On Material Representations of Deductive Processes.' [Discussion of metaphors on the lines of Lady Welby's 'significs'.] **W. Mitchell.** 'Structure and Growth of the Mind.' [Discussion of the review in v., 2.] **M. Meyer.** 'The Exact Number of Pragmatisms.' [Criticism of Lovejoy's articles in v., 1, 2. Lovejoy's distinctions are all unimportant, except that between 'meaning' and 'truth,' which is untenable. There are as many pragmatisms as there are pragmatists, but "neither science nor pragmatism is any worse off on that account".] v., 13. **W. H. Winch.** 'The Function of Images.' [An amusingly and brightly written paper, backed by experiments, in support of Woodworth's and Thorndike's view of the unimportance and frequent non-existence of images. It is suggested that much that is ordinarily classified as imagery is really sensational in character, and has been so treated because metaphysical prepossessions have led to the denial of sensational character to all processes which are not cognitive of an external world.] **H. H. Britan.** 'The Power of Music.' [It stimulates the emotions.] v., 14. **J. E. Boodin.** 'Energy and Reality: I. Is Experience Self-Supporting?' [The old realism and absolute idealism both fail to meet the problems of our finite world of change, and the static view of being must give way to a dynamic. "Being = energy."] **J. Dewey.** 'The Logical Character of Ideas.' [A reply to Pratt, v., 5. 'Truth' can't be identified with 'known fact,' because it belongs to judgments and when the fact is ascertained the judging is over.]

The Sociological Review. Vol. i., No 2, April, 1908. **Principal Jevons.** 'The Definition of Magic.' [Magic not a later or derived form of some previous conception, but dates from the earliest times when man put the question, in fear or astonishment, "Who did it?" The answer, "Some man working at a distance and in mystery," may carry with it magic, or if it be "Apollo," religion.] **Dr. W. Leslie Mackenzie.** 'The Family and the City: Their Functional Relations.' [The city the body of which the family instinct is the soul. The great problem to bridge the gap between the individual as the abstract individual and himself again, the organised city.] **Rev. A. J. Carlyle.** 'Lord Acton on the History of Freedom.' **Dr. J. W. Slaughter.** 'Psychological Factors in Social Transmission.' [Problem of relation between organic and historical heritage. Transmission not fully describable in intellectualistic terms. The feelings are organically and not socially transmissible; social transmission involves in each individual a complete new series of adjustments.] **John M. Robertson, M.P.** 'The Tutelage of Races.' Discussions: **G. Lowes Dickinson.** 'Sociology and Ethics.' **T. R. Bridgewater.** 'The "Child Criminal".' Notes on the Congress of the History of Religions. Reviews, etc. Vol. i., No. 3, July, 1908. **Sir C. L. Tupper.** 'Sociology and Comparative Politics.' [Necessity of treating Comparative Politics in a purely scientific spirit.] **W. Trotter.** 'Herd Instinct and its Bearing on the Psychology of Civilised Man.' [Conscience and the feelings of guilt and duty, the peculiar possessions of the gregarious animal.] **S. M. Iqbal.** 'Political Thought in Islam.' **Prof. L. T. Hobhouse.** 'The Law of the Three Stages.' [Critical examination of Comte's Law. It does express certain aspects of the movement of thought, but requires considerable modifications. We might talk of the stage of imagination, of dialectic, and the positive stage. Men begin the search for truth, one might say, with fancy; after that they argue, and at length they try to find it out.] **S. H. Swinny.** 'A Sociological View of the History of Ireland.' Discussions: Old Age Pensions. Reviews,

etc. Vol. i., No. 4. **Prof. W. R. Sorley.** 'The Problem of Decadence.' [Biological analogies apt to mislead. Intelligence and deliberate purpose more powerful in determining the destiny of States than of nations not organised politically.] **Barbara Freire-Marreco.** 'Authority in Uncivilised Society.' **Prof. J. S. Mackenzie.** 'Recent Contributions to the Study of Socialism.' [A consideration of H. G. Wells' *New Worlds for Old*, and Brougham Villiers' *Socialist Movement in England*. What is wanted is an earnest attempt to distinguish what can be advantageously undertaken by the State from what is best left to the enterprise of the individual.] **Prof. Geddes.** 'Chelsea, Past and Possible.' **S. K. Ratcliffe.** 'Aspects of the Social Movement in India.' Discussions: The Indeterminate Sentence. Reviews, etc. With this number the first volume of this important review is completed.

Revue de Philosophie. 1er Septembre, 1908. **Mgr. Le Roy.** 'Among the Primitive Africans.' [Evidence of missionaries to the belief in the human soul, and in disembodied spirits, good and bad.] **S. Belmond.** 'The Existence of God according to Duns Scotus.' [The existence of God is not a truth known of itself; it is provable *a posteriori*, not *a priori*.] **F. Chovet.** 'The Reducibility of the Principles of Reason and Unity.' [That the Principle of Contradiction and all other Primary Axioms are reducible to the Principle of Identity. Thus "the whole problem of the origin of ideas is reduced to the acquisition of the sole idea of being, which is given us in the experience of our own existence".] **P. Duhem.** 'Absolute and Relative Movement.' [Opinions of Humanists and Averroists in the sixteenth century. Valla and Nifo.] **P. Rousselot.** 'The Intellectualism of St. Thomas.' [A thesis at the Sorbonne. "Intellectualism usually means the primacy of the conceptual and discursive reason, *ratio*. Very different seems to be the intellectualism of St. Thomas. Intelligence, *intellectus*, is the grasp of being by the spirit, the sense of the real." Query, may not this exaltation of Intuition above Discursive Reason go to bring St. Thomas into line with Newman?] 1er Octobre, 1908. **G. Fonsegrive.** 'Certitude and Truth.' [An historical presentation of the difficulties against certitude. The individual is not incompetent to judge of truth, but he is then only certain of it when his judgment is borne out by society. The only irrefragable certitude is socially recognised certitude. Certitude is inchoate in the individual, complete in the community.] **S. Belmond.** 'The Existence of God according to Duns Scotus.' [That there is a Being holding absolute primacy in the three orders of Efficiency, Finality and Eminence.] **E. Peillaube.** 'Organisation of Memory.' [Amnesia, Somnambulism.] **Bishop Le Roy.** 'Among the Primitive Africans.' [Evidence of missionaries to African belief that the soul survives death, but not for ever, unless it be the soul of a great man; that there are also other spirits, some tutelary, some evil or roguish, no chief evil spirit or Satan; that there is one Supreme God, bearing many names; this God is inaccessible to magic, nor is ever worshipped under the form of any image; He is neither adored nor blasphemed; observed instance of African horror of blasphemy.]

Revue Néo-Scolastique. Août, 1908. **C. Piat.** 'God as an Object of Experience.' [Some caution against the delusions incident to any claim to such experience.] **M. de Wulf.** 'The Movement of Philosophy in Belgium.' [Flemish mediæval thinkers.] **A. Gemelli.** 'The Biological Basis of Psychology.' ["The biological explanation of psychical facts is absolutely insufficient, because the biological method is in that case inadequate to the object of study."] **Dr. Haller.** 'An Attempt at

a Mathematical Demonstration of the Existence of God.' [The demonstration comes to this, that a thing which exists, but might not exist, cannot claim existence as part of its own proper being; therefore it has existence from some being outside itself, a being to whom existence is part of that being's proper self, *i.e.* God. It is the old argument from contingent to necessary being, put in a mathematical dress.]

Revue de Métaphysique et de Morale. 16e Année, No. 2, Mars, 1908. **V. Brochard.** 'Le Dieu de Spinoza.' [The conception of Spinoza's divinity must be large and comprehensive enough to embrace the God of the Ethics and of the Tractate. In spite of all its transformations and additions, it is a Jewish conception, that of Jehovah, which is the soul of his system.] **E. Meynial.** 'Du rôle de la logique dans la formation scientifique du droit.' [Important in the formation and construction of laws, logic must remain a process placed at the service of the moral and social ideas of a people the better to realise them.] **A. Job.** 'La méthode en chimie.' [Must take physics as an instrument and guide, and seek its application and model in biology.] Étude Critique: **H. Norero.** 'La philosophie de Wundt.' [Begins a long, careful and appreciative study of Wundt's system. The writer holds that in Wundt the intellectualist method is so pursued as to result in the overthrow of ancient intellectualism.] Discussions: **E. Borel.** 'Réponse à M. Bergson.' **G. le Bon.** 'Réponse à M. Bouasse.' Questions Pratiques: **F. Challaye.** 'Le syndicalisme réformiste.' Supplement, etc. No. 3, Mai, 1908. **E. Colonna d'Istria.** 'Bichat et la biologie contemporaine.' **J. Maldidier.** 'Les caractéristiques probables de l'image vraie.' [It is not the decreased intensity of the image that leads us to consider it as subjective. It is the admission of its subjectivity that leads us to regard, and finally to experience, it as feebler. And this admission is due to their dependence on our will. Author gives a statement and criticism of antecedent views.] **M. Winter.** 'Importance philosophique de la théorie des nombres.' [A plea for the importance of the higher arithmetic. Analysis of mathematical theories always leads to arithmetical problems.] Étude Critique: 'La philosophie de Wundt' (*Fin.*). Questions Pratiques: **J. Delvolvé.** 'Examen critique des conditions d'efficacité d'une doctrine morale éducative.' Supplément. No. 4, Juillet, 1908. **R. Berthelot.** 'Sur le Pragmatisme de Nietzsche.' [The ideal which Nietzsche suggests is the expression of a life in progress; whereas the importance attached to the idea of proof by those he opposed, their submission of their will to an objective truth, appeared to him to betray an enfeeblement of the vital instinct. Important study of the influences determining the thought of Nietzsche.] **L. Vialleton.** 'La loi biogénétique fondamentale de Haeckel.' [The biogenetic law in its strict sense must be rejected, since it does not admit of the reconstruction, by the study of ontogeny, of the real series of the ancestors of a species.] **J. Dagnan-Bouveret.** 'L'Aphasie et les localisations cérébrales.' [Appreciative of the work of M. Pierre Marie. He has shown that Aphasia is an *intellectual* disorder, indicated by a marked diminution of intellectual capacity in general. He has tried to establish that the third left frontal circumvolution does not play any special *rôle* in the function of language.] Discussions: **G. Milhaud.** 'La philosophie de Newton, par M. L. Bloch.' Questions Pratiques: **J. Delvolvé.** 'Conditions d'une doctrine morale educative' (*Suite*). Supplément. No. 5, Septembre, 1908. Consists of a series of studies of contemporary philosophical movements in countries outside of France, *viz.*: Germany, by **J. Benrubi**; Great Britain, by **J. S. Mackenzie**; United States, by **F. Thilly**; Italy, by **G. Amendola**;

Scandinavia, by **H. Höffding**; South America, by **F. G. Calderon.** Supplément.

KANT-STUDIEN. Bd. xiii., 3, August, 1908. **Oskar Ewald.** 'Die deutsche Philosophie im Jahre 1907.' [An English translation of this article has appeared in the *Philosophical Review*, July, 1908.] **August Stadler.** 'Die Frage als Prinzip des Erkennens und die "Einleitung" der Kritik der reinen Vernunft.' [A not very satisfactory attempt to state the fundamental problem of the Critique.] **Richard v. Schubert-Soldern.** 'Die grundfragen der Äesthetik unter kritischer Zugrundelegung von Kants *Kritik der Urteilskraft*.' [This series of articles is not devoted to the explanation of Kant's views in æsthetics, but while starting from them proceeds to their independent development. This first article treats of the subjectivity of the beautiful, of the universality of the æsthetic judgment, and, lastly, of the distinction between the beautiful on the one hand, and the good, the true and the pleasant on the other.] **August Messer.** 'Heinrich Gompez *Weltanschauungslehre*.' [A review of the first volume of the above work.] **Paul Menzer.** 'Die neu aufgefundenen Kantbriefe.' [Five letters of some little interest.] **Heinrich Romundt.** 'Vorschlag zu einer Änderung des Textes von Kants *Kritik der praktischen Vernunft*.' [Together with a negative criticism by B. Bairch and P. Natorp.] Rezensionen, etc.

ARCHIV FÜR SYSTEMATISCHE PHILOSOPHIE. Band xiv., Heft 2, 25 Mai. **Ludwig Stein.** 'Der Pragmatismus.'—II. [Investigates the history of the term "Pragmatism". The kernel of the whole problem, the primacy of will over thought. Pragmatism does not offer us a new *Weltanschauung*, but an old one with a fresh tone, timbre and manner. Pragmatism a continuation of English tradition. Its method is philosophically one of the oldest. It aims at the construction of science on the basis of a logic based on biology. The "power to work" is really an *a priori* principle imperfectly recognised. Utilitarian Logic, and Pragmatism as a method and as a genetic theory of truth is nothing else, must have at least one constant in a world of sheer variables. The contest between it and intellectualism is just the old one between mechanism and teleology. Whether it can this time be fought out to a finish or not, Pragmatism deserves to be welcomed as a great centripetal force in modern thought.] **Friedrich Sommer.** 'Die Grundzüge einer Sozialaristokratie.' [Zweites Stück.] **M. Tramer.** 'Stetigkeit der Geometrie und der Zahlen.' **Theodor Lessing.** 'Studien zur Wertaxiomatik' (Zweites Kapitel). [Considers certain ethical problems: the *privatio boni* of Augustine; the *ubi nihil vales, ibi nihil velis* of Geulincx; the *Kollision der Pflichten* of Fichte; the aberration of conscience; the modifications of values; *Wert und Wertwille*. Normative nature of moral laws, requiring a material sphere to regulate.] **Viktor Stern.** 'Der materialistische Dualismus.' [The world must be extended in space and time if our thinking is to be right. Matter is the only real existence; and besides the movement of matter there is the consciousness of this movement. Understanding under material matter and movement, then knowledge is immaterial, and we accept a Dualism.] Drittes Preisausschreiben der "Kantgesellschaft". Jahresbericht über sämtliche Erscheinungen auf dem Gebiete der systematischen Philosophie. Heft 3, 7 Septembre. **Ludwig Stein.** 'Das Problem der Geschichte.' [A discussion of historical categories and of historical prediction.] **Otto Janssen.** 'Gedanken über den empirischen Ursprung der Kausalität.' [Every theory that seeks the meaning of causality either in the nature

of the successive or from the concept of the correlate is met with difficulties. To the idea of change must be added the concept of force. The ideas of willing and the causal ground are of the same nature in origin, and probably connected with our sense of innervation. In the transition from subjective to objective causality, impulse is changed into the idea of force. Examination of psycho-physical parallelism.] **F. Lifschitz.** 'Zur Kritik des Relativismus: Aus einer Methodologie der Wissenschaften.' [Relativism really presupposes the possibility of Dogmatism and Apriorism.] **Albert Sichler.** 'Über falsche Interpretation des kritischen Realismus Wundts.' [Fortsetzung.] **Kristian B. R. Aars.** 'Der Hass und die Liebe.' [Hate and love not sensuous but spiritual feelings. They constitute egocentric morality, alongside of which objective morality develops.] **N. Losskij.** 'Thesen zur "Grundlegung des Intuitivismus".' **Georg Wendel.** 'Kritik einiger Grundbegriffe des transzendentalen Idealismus.' [A criticism of Kant's ethical and æsthetic theories.] Jahresbericht. **A. Zielenczyk.** 'Ein Abschnitt aus der polnischen Philosophie der Gegenwart.' Neueste Erscheinungen, etc.

Vierteljahrsschrift für Wissenschaftliche Philosophie und Soziologie. Jahrgang xxxii. (Neue Folge vii.), Heft 1. **Heinrich Karl Schwarze.** 'Die Ethik Herbert Spencers. Eine kritische Studie.' [Long account of Spencer's Metaphysics, Epistemology and Ethics, followed by a detailed criticism.] **R. Hönigswald.** 'Zum Problem der philosophischen Skepsis.' [Discusses the problem in the light of the relations between Kant, Hume and the ancient Sceptics. Philosophical Criticism overcomes epistemological Scepticism by setting aside its problem, which is that of a knowledge of the Thing-in-Itself.] **Richard Müller-Freinfels.** 'Zur Theorie der ästhetischen Elementarerscheinungen.' [Discusses rhythm, harmony and the elementary forms of plastic art.] **Demetrius Gusti.** 'Die soziologischen Bestrebungen in der neueren Ethik.' [The ethico-literary movement full of the ideas of social evolution. Examination of attempts at establishing a sociological basis for Ethics. Necessity of making Sociology a subject of University study.] Besprechungen, etc. Jahrgang xxxii., Heft 2. **Richard Müller-Freinfels.** 'Zur Theorie der ästhetischen Elementarerscheinungen' (2 Artikel). **Franz Oppenheimer.** 'Moderne Geschichtsphilosophie.' [Discusses the attempts of Lamprecht and Breysig to enounce a satisfactory theory of history. Danger that with Lamprecht's theory one may manipulate the facts to suit it, illustrated from Schneider's work on the Ancient Egyptians. Account of the work of Brook-Adams. His economic premisses faulty; his distinction between imaginative and economic men and races as fundamentally different overlooks the influence of environment which might make of one the other.] Besprechungen. [Contains a notice of Mr. Schiller's *Studies in Humanism.*]

IX.—NOTES.

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THE THIRD INTERNATIONAL CONGRESS FOR PHILOSOPHY.

This Congress assembled at Heidelberg on the 31st August last and the meetings lasted until 5th September. The state of Baden and the town and the University of Heidelberg united in giving the members a very hearty welcome. The usual *fêtes* and excursions were held, and here among the kindly people of the South one could catch a glimpse of the Germany of the past, the Germany of the era of philosophical idealism, the disappearance of which is so much lamented by the publishers of metaphysical literature.

Great Britain and Ireland were but slenderly represented, contributing only some half-dozen to a total of a good 300 members; and the

honour of maintaining English as one of the four languages employed in discussion was left almost entirely to America. It is noteworthy that the scope of the Congress was narrowed by the almost complete absence of the experimental psychologists. At the same time some almost extraneous topics were included, as, *e.g.*, the problem of a universal language. M. Couturat was there to advocate his own improvements on the existing schemes. As to much of the work of the Congress, ranging, as the papers did, from contributions to symbolic logic, to investigations into minute points of history, it is impossible to generalise briefly. In many debates, however, the current of thought showed a strong tendency to set in one particular direction, namely, towards a discussion of Pragmatism. But however it may be with the leaders of thought abroad, among the mass of those interested in Philosophy on the Continent the consideration of this doctrine does not seem to be so far advanced as with us. Consequently there was very little that was novel in the discussions which resulted, though it was interesting to see reproduced once more all the familiar features of the early stages of the controversy—the lightheartedness of the innovators and the intolerant indignation of the older school. Probably the Congress would have been better able after those preliminary exercises to appreciate the exact significance of the paper with which Prof. Royce opened the first public discussion. Prof. Royce was willing to admit "that the empirical truth into which our sciences inquire, is relative to the observers, to their functions and to their individual needs; so that Instrumentalism and Relativism" (moments in the Pragmatist doctrine) "express a very important part of the nature of the truth that is knowable to man, concerning human life and concerning the physical world". Nevertheless there is, he maintains, a sphere within which *absolute* truth is found. This is the domain of "Pure Mathematics and Modern Exact Logic," the truths in which have, by the researches of Mr. Russell and others, been put into a position which cannot be defined in terms of any form of Relativism. But, says Prof. Royce, the fundamental relations which pure mathematics and exact logic discover are still "relations that determine the Form of our activities" and hence "may be called the Form of the Will itself". Thus he hopes to appease the partisans of voluntarism. At the Congress, however, Mr. Schiller, on behalf of the Pragmatists, repelled these overtures for peace and, in the fury of the conflict which immediately broke out again, little more was heard of them.

Much disappointment was felt by members when it became known that Professors Mach, Lipps and Bergson, the latter two of whom had agreed to read papers, were unable to attend. The meetings closed with a discussion on 'the conception of Law,' and we were indebted to our president, Prof. Windelband, for leading the debate. Next Congress will meet at Bologna in 1911. The fifth is due four years later—in 1915. Surely by that time some British university should be ready to open its doors to the philosophers.

G. R. T. Ross.

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—SOLIPSISM.[1]

By F. C. S. Schiller.

"Solipsism is the most detestable form of wickedness that ever entered into the mind of a philosopher." This pronouncement, the *solipsissima verba* of an intelligent undergraduate, occurred in an Oxford Examination paper last summer. It should afford philosophers much food for reflection. At first sight it seems to evince only an insufficient apprehension of the philosophic mind's capacity for crime. There is a not ignoble apologia for the Speculative Life in the suggestion that if philosophers were not allowed to indulge in it they might be committing murders instead of paralogisms. Even so the Philosopher-Villain has been, as Plato himself has testified,[2] a good deal commoner than the Philosopher-King. Possibly however the writer was desirous only of complimenting his tutor and of taking an optimistic view of his character. But supposing him to have been sincere, why should he have regarded so practically innocuous a thing as Solipsism as an offence, and have classified it as a form of wickedness, however mild? And what did he mean by Solipsism?

These questions are worthy of investigation, and the

[1] When one considers what an appalling amount of time and energy is annually consumed in Examinations, and how little any of the parties to them have to show for it, it is surprising that they are so rarely utilised for the purpose of gauging the trend of current thought upon the subjects examined on. That they can be made to afford instruction to others than the examiners will, I hope, be a conclusion distinctly suggested by the present article, which is largely inspired by the answers to a question set last year in the Oxford School of *Literæ Humaniores*.

[2] *Republic*, 487 D.

present writer feels himself peculiarly fitted for the task. For though not himself a solipsist, he has been repeatedly mistaken for one, even by no less an authority than the Editor himself (MIND, xvi., p. 587).[1] He may be presumed therefore to hold views sufficiently akin to Solipsism to appreciate it, and yet to be interested in distinguishing himself from it.

Inherently of course Solipsism is an absurd predicate to fasten on to a humanist philosophy. Humanism is essentially social, and therefore pluralistic. But for this very reason it cannot treat the problem of Solipsism with that curious mixture of *hauteur* and frivolity to which monistic philosophies are driven. It may honestly admit and sympathetically examine the case for Solipsism, and gather therefrom much instruction about the processes by which individual valuations acquire social currency. A monistic philosophy on the other hand is always haunted by the dread that if the One which alone truly is should turn out to be in any real sense spiritual, it may be driven to admit that Solipsism is the ultimate truth. It is tempted, therefore, to hedge, and to obscure its logical implications, and to fix a gulf between the theoretic meaning of its principles and its practical consequences.

A humanist can afford to be more candid—because no logical necessity impels him. He is quite free in the matter. If he wanted to be a solipsist he could be. If he were, he need not hesitate to say so. He would be afraid of no one, for he would see that there was no one to be afraid of. But if he did not want to be a solipsist, and denied that he was, this assurance should suffice, because it would yield a trustworthy guarantee. And if it could be observed that in his actions he did *not* ignore the existence of others, but recognised them as beings with thoughts, wills and tempers of their own, for which he was both unable and unwilling to undertake the responsibility, the guarantee would be complete.

For it is a unique peculiarity of a humanist's philosophy

[1] This criticism would seem however to proceed from an insufficiently concrete consideration of the postulation of other minds. They may be postulated in two ways—(1) It may be held that certain experiences behave *as if* there were other minds behind them. If so, this postulate need *not* lead to a belief in the existence of other minds. But if (2) other minds are postulated as *existing*, then the confirmation of this postulate by its working seems necessarily to prove that other minds really and truly exist. A mere appeal to postulation thus leaves either of these ways open; but only the first could be correctly described as compatible with Solipsism.

that in it it is possible to argue back from a behaviour to the belief that underlies it. He holds that the reality of a belief depends on, and is tested by, its applicability. His beliefs therefore must be acted on, and he cannot afford the luxury of theoretic beliefs, which cannot be acted on in practice. If he acts on a belief, he must hold it true; if he does not act on it, he does not truly believe it. In all other philosophies the 'highest' truths may be unpractical and inapplicable to life, while the beliefs implied in action may be secretly despised as 'practical makeshifts'. Hence arise endless possibilities of ambiguity and misconstruction, not to say disingenuousness. It cannot, therefore, be inferred that if such a philosopher behaves as if his fellowmen were other than himself, or he himself were other than God, he really believes this. He may only be pretending, or finding it necessary to convey a false impression for practical purposes, because in his philosophy there is no necessary connexion between theory and practice. Now in practice no one actually behaves as if he not only owned the world, but also *was* the world; but whereas in the humanist's case it is possible to infer from his actions that he does not believe that he is the world, in the case of other philosophers it is not. Humanism, therefore, may safely be believed when it disavows Solipsism; other philosophies may be Solipsisms at heart, though they do not avow this in their behaviour.

But what is Solipsism? It may best be defined perhaps as the doctrine that all existence is experience, and that there is only one experient. The Solipsist thinks that *he is the one.*

Now if this is thought out, it will be seen that very many sorts of philosophers are ultimately solipsists or as good as solipsists. When they do not themselves see this, they may fitly be called crypto-solipsists. Crypto-solipsism may also be ascribed to any view which needs Solipsism for its logical completion, and so the various sorts of Solipsism add up to a formidable total.

1. That the 'absolute idealist' is a solipsist need only be barely stated. For the matter has been thrashed out elsewhere.[1] He is a solipsist because he believes that the Absolute is the sole experient, and that he is himself the incarnate Absolute. A good many absolute idealists, moreover, see this, and are proud of being the Absolute.[2] But it

[1] *Cf. Studies in Humanism*, x.

[2] We learn however from one answer that when the writer (under ether) dreamt that he was the Absolute 'and that in fact Solipsism was true,' he felt 'very lonely and miserable'.

is needless to linger over this distressing sort of philosophic megalomania, as its nature is so clear.

2. 'Subjective idealists' are classed as solipsists, almost by acclamation; and yet this attribution seems in their case far more disputable. For a good many of them are also charged with pluralism, and it is hard to see how one can be both a pluralist and a solipsist. Why moreover should not Berkeley's pluralistic universe of 'Spirits' be taken by us as seriously as it was intended? It may have been a mistaken compliment to the Deity to impose on him the duty of lurking behind every particle of 'matter,' but this is no reason for denying the communion of spiritual beings. The only difficulty Berkeley's system here presents is that of explaining how the individual comes to suspect a transcendent cause beyond the flow of appearances; but this difficulty is common to nearly all philosophies, so that we should be ill-advised to press the point.

3. Aristotle on the other hand is clearly a crypto-solipsist, and if Aristotelians took their master seriously and tried to live up to his precepts, they should all be solipsists. For though at first sight Aristotle seems a perfect type of common-place realism, he has a queer streak of romance at the bottom of his mind, which nearly always in the end transfigures his conclusions. And so it ought not to surprise us that he has put up Solipsism as his supreme ideal. He makes his God into an incorrigible solipsist. For he is completely wrapped up in the contemplation of his own experience (*νόησις νοήσεως*), in the ecstatic enjoyment of his own eternal perfection. God thinks only of himself, not of the world; *αὐτὸν ἄρα νοεῖ*, Aristotle gleefully declares, and the rest of the world does not exist for him. Unlike Olympian Zeus, he is non-social, and leads a *βίος μονώτης*, like a beast. Nevertheless Aristotle thinks we ought to imitate and emulate his God; he insists that such imitation is not futile flattery, but the best and highest thing we can do. Thus the Theoretic Life and the injunction *ὅπως μάλιστα ἀθανατίζειν* mean—'be as solipsistic as you can, as your imperfect *ὕλη* will allow'. The concluding romance of the *Nicomachean Ethics*,[1] therefore, means that Solipsism is the highest truth.

4. If it is permissible to consult the opinions of the young and to accept them as omens of the future, we shall have to say that most of the historically famous philosophies are logically solipsisms, or at least will hereafter be treated as such. For the answers to the 'Greats' question mentioned

[1] Book x., ch. 7 and 8.

at the outset unequivocally teach that the ranks of the Solipsists include Berkeley (without a scruple), Hume (despite his annihilation of the self), Locke (despite his belief in external reality), Descartes (because he is supposed to have started that pernicious falling away from Aristotle which is called modern philosophy), Fichte and Lotze (because they were German idealists), all personal idealists, pragmatists and humanists *en bloc* and as a matter of course, and last, but not least, Dr. Rashdall, who was even said to be 'the typical solipsist'. Evidently, if these *voces populi* are to be believed, the solipsists are a very formidable band, both here and in Hades. On the other hand some may perversely think that these dicta are not so much contributions to the history of philosophy as reflections upon the way this subject is taught in Oxford.

5. Still Solipsism is strangely insinuating, beyond doubt, and, especially when disguised as Crypto-Solipsism, worms its way into the most unlikely places. It has for example a curious affinity for the New Realism. To illustrate this it will not be necessary happily to examine all the New Realisms *seriatim;* for their name is legion, and they agree in little but this that none of them can find any obvious escape from the old difficulties of the Old Realism. It will suffice therefore if we try to understand the reason of this affinity, and then trace its working in two or three of the most notable brands of New Realism.

To attribute solipsistic leanings to New Realisms seems at first a paradox which is not adequately vindicated by the common experience of the meeting of extremes. But there are in this case real logical grounds for the coincidence. The New Realist gets so absorbed in his object that he takes no account of the subject at all, and so is not on his guard against *his own* subjectivity. Hence his account of the Real becomes *de facto* his own private view of it, which cannot be accommodated to any one else's and is at bottom a fabrication of his own idiosyncrasy. Thus Solipsism finds it easy to enter into New Realisms and to possess them in at least four distinct ways.

(1) New Realisms are mostly uncritical because they are so unpsychological. Despising the study of the history and pedigree of mind, the New Realist accepts as real whatever he thinks he perceives, without inquiring as to how he came to perceive it. Consequently he is hardly conscious that he is not infallible, but is frequently forced to correct his first perceptions by subsequent experiences. His trust in the perception of the moment blinds him to the need of recognising and

amending his 'ideas'. He falls a prey to the 'intuitions' of the moment, and never inquires how 'true' intuitions are discriminated from 'false'.

(2) In consequence of never comparing his perceptions at different times with each other, he never asks himself how his perceptions accord with those of others. Hence he fails to notice the social and human character of truth, and to discover that the most imperative reason for assuming the existence of subjective 'ideas' lies in the necessity of a social compromise. When A and B perceive reality differently, it is easier, humaner and better to ascribe to both an 'idea' of reality than to assert the unreality of one of these perceptions. Reality is thus cleared of a contradiction which can be treated as 'merely subjective'. New Realism on the other hand, after ruling out such problems as psychological irrelevance, unwittingly bases its analysis on the single case of a knower knowing *his* world, without regard to the worlds of others. And this procedure is naturally and essentially solipsistic.

(3) Even this case of a single mind at a given moment it cannot analyse effectively for lack of psychological interest. Hence it fails to perceive the all-pervading selectiveness of all thought, and to reflect on the important fact that whatever is perceived has been conditioned by the direction of attention upon it, and preferred to something else that might have been perceived if the attention had been directed otherwise. About the totality of reality an infinity of truths may be enunciated or perceived; hence the one which is enunciated or perceived is necessarily the outcome of an enormous amount of selection. And it is obvious that the ground of this selection cannot lie in the reality as such, but must proceed from the interests of the selector. The facet of reality which is affirmed cannot have been selected by itself. For alike in active and in passive experiencing reality is always present as a whole. Hence the mere perceiving of any particular reality already implies an immense adjustment or cutting down of reality to subjective interests, which if unchecked may easily develop into Solipsism.

(4) Being of a trustful and dogmatic character, the New Realism does not expect to be deceived and misled into error. It is consequently ill-equipped to deal with the deceitfulness of nature in a world in which everything genuine is mimicked, protectively or aggressively, and even a childlike faith in absolute truth is no guarantee of infallibility. Hence so long as the New Realist refuses to be critical and to study this whole apparatus of deception, he will accept all its results as

real just as they appear to him, and once more glides into an unwitting Solipsism.

But it is high time to illustrate these generalities by their application to three selected cases of New Realism. All of these appear to be psychogenetically joint products of incapacity to reply to Mr. G. E. Moore's 'refutation of Idealism,' and of unwillingness to carry Kantian principles out completely into a consistent account of mental activity, for fear of lapsing into 'subjectivism'; but as two of these have not yet appeared in the philosophic arena, they must be described anonymously as secret doctrines endemic in two of our leading colleges.

(*a*) The first of them is the more lively, or less stable, form, and varies perceptibly from year to year. It is convinced that the troubles of dogmatic philosophy began when Locke introduced 'ideas' into it, and that if ideas are abolished all will be well. It has no ideas, therefore, in its theory of knowledge. It starts from a definition of knowledge as an immediate apprehension of what is. It perceives realities, and not 'copies' of them. There is, therefore, no 'gap' between subject and object, and no need to interpose ideas between the mind and reality and to puzzle oneself vainly about their 'correspondence'. The mind is caught fast in the embrace of that which is, and nothing can divorce them. By thus shutting out 'ideas' it hopes to leave no loophole for the demon of subjectivism to enter in.

The theory has its difficulties, doubtless, especially when asked to explain the nature of error, but on the whole it is very reminiscent of Aristotle and seems very sensible. It reproduces, almost completely, the view of reality initially taken by an unsophisticated human mind.

And yet its weak point lies just here. It is good for *a* human mind. But not for more. As soon as the problem is complicated by the introduction of a second mind, its solution ceases to satisfy. For the second mind also perceives reality. Only it does not perceive quite like the first. Each naturally maintains that it perceives rightly, and the other wrongly. The result is a row. To allay this disturbance, and to render social life possible, therefore, a compromise has to be effected between the conflicting claims of divergent minds. Commonsense rules that to avoid quarrels *neither* shall be deemed to be in direct contact with the object as it really is. For if both had an immediate and inerrant apprehension of what is, the actual divergence between its results would plainly be impossible. But both are supposed to recognise one and the same object in their own subjective way. The common world

of reality is variously reflected in the various individuals that cognise it. Thus to avoid greater evils a subjective factor is introduced into all knowing; the "ideas" of various minds are interpolated between the mind and the realities it tries to know, but can never apprehend immediately. All perception of reality thus becomes representative, and is subject to subjective distortion, and how far this may go can never be determined *a priori*.

Hinc illæ lacrimæ; hence the long agony of the theory of knowledge, from Descartes to Kant and from Kant to Humanism. For the whole problem of what it means for two minds to know the same thing, and of how it can be called the same if they know it differently, rushes back upon us.

For Humanism indeed the coast remains clear and the answer simple. It merely bids us complete the work of Kant (most infelicitously called by him Copernican) by describing the psychical functioning to which our data are conformed *in their integrity, i.e.*, without mutilating, depersonalising and subliming them by fictions of a *Bewusstsein überhaupt*. The 'subjectivity' which was thought to vitiate cognition and refused to be eliminated, is a blessing not a curse; for it is really that which gives the needful cue to the 'objective' ordering of the initial mess of crude experience. It is the importance of some of its contents for the purposes of human life which confers upon them a superior reality; it is the usefulness of some ideas which leads to their (intersubjective) recognition as 'true' and objectively valid, and effectively discriminates them from the vagrant fancies that are rejected as worthless and therefore remain 'merely subjective'. For a mind, however, which has become replete with fixed ideas that the thinker's personality must at all costs be ignored, that the study of psychical fact is incompatible with that of physical order, that the genesis of knowledge has no relation to its nature, and that once science condescends to take note of the individual it is for ever debarred from noticing anything else, this humanist way of producing 'objectivity' will seem to demand far too radical a rethinking of old prejudices. It will be rejected doubtless; but what will be done about the problem?

It may be suggested to the New Realist that the simplest way of maintaining his original position and escaping from the difficulties of this whole criticism is to turn solipsist. As he cannot find room for the objects of other minds, he had better get rid of the other minds. If he will systematically refuse to recognise the other minds that seem to disagree with him, he avoids the complication which such recognition

inevitably introduces. He is left alone with his objects, and no one can question the rightness of his perceptions. In words perhaps this position may be thought to fall short of Solipsism, because there are still realities for him to perceive. But he has become the autocratic judge of this whole reality; and this is in substance Solipsism. He is the only mind in the world, of which he is the sole experient. *Οἷος πέπνυται, τοὶ δὲ σκιαὶ ἀίσσουσιν.*[1]

(*b*) The second type of New Realism seems less extreme, and one might prognosticate for it a longer life. It makes attempts to account for the existence and correction of error, and for the growth and improvement of knowledge. To do so it has to admit the presence of a subjective contribution in our perceptions of reality; but it regards this as the source only of error and 'opinion'. Between 'opinion' and 'knowledge' it fixes a great gulf, like Plato in the *Republic*. Knowledge is of the object, and though it involves a relation of the mind, it must not be supposed to alter the nature of its terms. Hence the object *in* the cognitive relation is just as it was (or would be) in itself, and nothing about it is dependent on the mind's knowing it. This last corollary is of course somewhat difficult to defend, when it is questioned. So is the gulf between opinion and knowledge. It might prove hard to adduce an unequivocal example of 'knowledge,' and to show that what is so called is ever more than 'opinion'; and again the theory is hard put to it to assign a tolerable position to a good many facts, *e.g.*, those of colour-perception.

But it is when confronted with the facts of error and difference of opinion that this New Realism most clearly seems to falter. When A and B both claim to apprehend reality, but differ irreconcilably as to what reality is, it is at a loss to decide which of them is right. And yet the need for such decisions cannot lightly be denied. For such differences are deep-seated and persistent. Two men may even agree entirely as to the facts, so far as human science can express them; yet they may still be worlds apart in their attitude towards them. What the one hails with joy, the other may recoil from with abhorrence. For example, one may worship the syllogism, and another despise it, though both may agree upon the perfection of its form. One man may shrink from immortality, another from extinction. To one the belief that all is one may be an inspiring gospel, to another the paralysis of all effort and the grave of all interest in life. Does it not seem

[1] *Cf. Odyssey*, x., 495.

piteously inadequate then to decree all such differences out of existence by calling them differences of *opinion*, proving only that there is no *knowledge* of the matters they concern? And moreover it is vain; for men differ as to the truth about all things (even about mathematics so soon as one gets beyond the merest verbal trifling), and differ most signally about the matters of the highest import, such as God, Freedom and Immortality, and the meaning and value of life. This New Realism, therefore, has either to confine itself to the abstract enunciation of the veriest platitudes, such as that everything either is or is not, though no one can tell which, or to exclude from the realm of knowledge proper everything that is really important and therefore in dispute, and to assume an agnostic attitude on such questions as, *e.g.*, whether God exists and the like.

Hence once more a great temptation comes upon the New Realist. He could treat the whole body of his own opinions as 'knowledge,' if only he could suppress the opinions of those who disagree with him. This he could do in two ways, either practically or theoretically. Of these the practical way would doubtless be preferable in itself, were it not impracticable; however much he may desire to produce unanimity by the old effective methods, ruthless persecution for the sake of establishing a philosophic theory of knowledge would not be tolerated in these days.

In theory however Solipsism grants him the means to achieve his end. If he can persuade himself that he alone experiences, he can hold that whatever he feels certain of is knowledge, and the 'opinions' of others need no longer contradict his. He can treat them as illusory equally with themselves.

The difference between this type of New Realism and the first will be plainly this, that whereas Solipsism was a *necessity* for the truth of the theory in the first case, in the second it is only a *convenience*.

(*c*) A third crypto-solipsistic form of New Realism has been promulgated by Prof. S. Alexander in his presidential address to the Aristotelian Society (1908). Like so many realists, he assumes the chief crux, *viz.* that perception is unequivocally of the object, and that the object is not mental but physical. It is assumed also that perception makes no difference to the object, and that therefore a hundred persons may all see the same tree. So far this is only naïve Realism, and not obviously untenable. But what are we to think of the further doctrine that the memory also of the tree is a physical object? Do the hundred persons have the same

memory-object, or does each have his own, and are there as many objects as there are memories? If so, the one perceived tree has magically blossomed into a hundred remembered ones, and these must all be related to the tree and to each other. And what of the changes memory-objects undergo? Are they too all 'physical' and not mental? The only way to reduce this plethoric wealth of 'physical objects' to something like a manageable compass would seem to be that of Solipsism, and this might also relieve the theory of the embarrassments in which its obvious and avowed inability to account for error at present involves it.

6. One more example of a constructively solipsistic doctrine may complete our survey. The doctrine that Subject and Object are mutually interdependent is crypto-solipsistic. It begins, tamely enough, by holding that the Object must exist for a Subject, and no subject can exist without objects. This doctrine, in its proper meaning, is a purely verbal truth, an affair of definitions, stating the meaning of the words 'subject' and 'object'. But in Oxford it is, for some inscrutable reason, still regarded as important; and strangely enough is credited to 'idealism,' instead of being classed as thoroughgoing relativism.

At any rate the doctrine becomes either Solipsism or nonsense so soon as an attempt is made to apply it. If it seriously means to affirm that the existence of the Object is conditional upon that of the Subject, it implies that whenever a subject dies the world of objects must be annihilated with it. But this is clearly not what happens to our common world whenever one of us dies. It follows therefore either that the death of a subject is inconceivable and impossible, or that what died was not a subject, or that the common world is not an object, or that what was annihilated was not the common world and so that the latter is *not* dependent on its relation to a subject. But the first of these alternatives seems contrary to fact, while the last is contrary to the theory; the others render it irrelevant to the problem of knowledge. For what we wanted to know was what happened to the 'objective' world when a 'subject' died, on the 'idealistic' assumption that a 'subject' is implied in the persistence of every 'object'. Clearly if this is so, the persistence of the Object after the death of a subject shows that the Subject which sustained it does *not* die when one of us dies (alike whether that death means our extinction or our transfer to a different world). We, therefore, and our world are not Subject and Object in the sense required by the theory. The Subject is not one of us, but must be a category, or a

Cosmic Ego, or what not. But if so, how is it, and its Object, relevant to the nature of our knowledge? There is on the one hand the deathless Subject of an indestructible world, and on the other we, who are not subjects in this sense, perceiving objects after our kind; and between the two there is no real connexion. The Subject, doubtless, may continue to perceive the changeless world which forms its Object throughout all the mischances of our mortal life; but we never perceived that world, and to our questions about the relation of our world to our minds we get no answer. The whole doctrine has thus become an irrelevant speculation concerning a Subject and an Object about which we only know that they are not human, nor humanly knowable; it leaves unexplained and unintelligible the position of the pseudo-subjects and pseudo-objects which surround us.

Once more the only way of really making the theory mean anything and of really correlating subject and object is to construe it solipsistically. The consistent idealist must hold that since with the Subject there would pass away the Object, it is only if, and so long as, *he* is a subject that a world of objects can endure.

It is possible that by this time the force of the argument may be producing an impression that for company's sake every philosopher, who cannot bear to stand alone and to lead the *βίος μονώτης*, had better own to Solipsism. But such intimidation will not daunt the humanist or cause him to desist from his endeavour (1) to refute Solipsism and (2) to solve the solipsistic puzzle.

(1) The humanist's refutation of Solipsism is simple and sufficient. He is not a solipsist, because he chooses to believe in the existence of others. He believes this not so much for the sentimental reason that he does not want to be alone in the universe, but because he does not want to regard himself as the author of his whole experience. He will not take the responsibility of being all there is in a world such as is now provided. He does not desire to be any or all of the other minds, nor the totality of reality. He sees that he cannot be the Absolute without being also the Devil (and an insane Devil at that!), and so he prefers to be neither.

Now this position seems eminently reasonable, but if any one declines to accept it, the humanist cannot *compel* dissentients to adopt it. He cannot compel them not to be solipsists, if they prefer to regard him and everything else as just creatures of their disordered imaginations: nor does it follow from the nature of his theory that he should have this

power. Whereas to a solipsist it must appear extremely puzzling, as well as annoying, that he should not be able to avoid contradiction and resistance at the hands of what *ex hypothesi* are his own creatures.

The humanist refutation of Solipsism, then, begins frankly with a postulate. Into the origin of this postulate it is no more necessary to inquire here than in other cases. For it seems unmeaning to discuss the antecedent reasonableness of a thing not yet in existence. The human reason must have something to reflect on before it can discuss the value of anything. A postulate, therefore, has to be made before it can be justified. The 'origin,' therefore, of our fundamental postulates can only be deduced in a 'mythical' form. But we are not really concerned with it. Whether it was an inspiration or a random guess, the postulate that there are others has come into existence. Once made, it has of course been tested by its working. And it will hardly be disputed that it has worked very well. It is therefore accounted reasonable and true by the generality of mankind, who are not philosophers. And a humanist philosopher at any rate is not easily persuaded that in so vital a point the experience of mankind is wrong. He will therefore claim the right to hold the postulate true, because, and so long as, it works.

It will be noticed that the refutation of Solipsism by the success of this postulate is thoroughly pragmatic. It is neither *a priori* nor absolute. It does not rest on presuppositions about the possibilities of all experience. It does not profess to show that Solipsism is unthinkable. It is willing to allow that Solipsists may exist, and even flourish. It is willing to listen to what they have to say for themselves. It makes no higher claim for its own postulate than that it seems to provide a congenial and adequate way of handling the facts of human experience. If that experience should alter, it admits that it might be necessary to revise our postulates. But while it endures as it is, a successful postulate is as true and as reasonable as truth can be.

But does not this concede too much and admit that a reasonable Solipsism also may be possible? To deny this possibility *a priori* would be to deny that there may be legitimate differences of opinion, conditioned by the deep-seated differences of human personalities. It would imply a relapse into that absolutistic intolerance, which has provoked so many inhuman attempts to reduce all thought to the level of a mechanical uniformity, and renders the pretensions of metaphysical system-mongers so ludicrous a series of failures. It does not follow then from the fact that Solipsism may

reasonably be denied that it may not reasonably be upheld. This latter contention therefore demands distinct examination.

(2) If the belief in other minds is a postulate, any one may, if he chooses, try to dispense with it. But he still remains under the obligation of devising an alternative scheme for the conduct of his life. Let him, therefore, try. His position is that his whole experience is like a dream, and he interprets his waking experience by his dream experience, instead of *vice versa*, like the generality of men. He believes that he makes his dreams and all the creatures in it, and this belief he extends to all the incidents of his life.

There seems to be nothing theoretically absurd or untenable about such Solipsism; it may even claim the merit of greater consistency as compared with the vulgar view that interprets solipsistically dreams alone. But the solipsist would have of course to adapt his theory somehow to his practice. He must not for example be led to imagine that because life was a dream of his, he could know beforehand how the dream was going. For if he imagined this, events would soon refute his theory. In other words his Solipsism would have to be *empirical*, and not *a priori*, precisely as is our ordinary solipsistic interpretation of dreams.

A Solipsism so conceived would seem to be harmless. It would make no practical difference. Our solipsist would have to recognise in the persons and objects of his 'dream' quite as much 'independence' and ability to resist the control of his will as the most benighted pluralist. He would have to treat them as other than his dreaming self. We all usually pay this amount of respect to the creatures of our dreams. If the solipsistic theory of their nature is to be retained, it is on condition that it remains a mere theory which is not allowed to affect conduct. Should it be allowed to do so, it would of course spell disaster, and would refute itself in the one really final way, *viz.*, by the elimination of its holder.

Nevertheless it is a point deserving of consideration whether theoretic exception should not be taken to an assumption which Solipsism shares with Common-Sense. Both assume it as self-evident that the solipsistic interpretation of dream life is valid, *i.e.*, that the self that *has* the dream is identical with the self that *makes* the dream. This, however, may be disputed. The dreamer is the victim, and not the maker, of the dream which surprises and torments him. Hence every dreamer, and every solipsist, is not really *one* but *two*. The strange possibilities of such an inherent

duality in the 'self' are vividly illustrated by the famous 'Beauchamp' case so graphically recorded by Dr. Morton Prince,[1] in which, apparently, the 'maker of dreams' obtained control of the body. If then after the fashion of Miss 'Beauchamp' every solipsist is accompanied by his 'Sally,' it might become a subtle question whether the dreamer or the maker of dreams was really entitled to be a solipsist, and how sincerely the former could really take a solipsistic view of his complex personality. But it will probably be vain to raise this point; metaphysicians have always been too neglectful of ordinary people's dreams to be critical of their own; and besides the subject is too recent, too sensational, and above all too psychological, to appeal to them.

For a philosophy, however, which is content to stop short at the theoretic level there is no other way of refuting the Solipsism which we have described. But for a philosophy which insists that theoretic doctrines must be capable of application to practice the last word is not yet said. It will fasten on the very feature in this Solipsism which exempted it from theoretic refutation, and justify thereby its final condemnation. A Solipsism, it will say, which must in practice recognise other minds and makes no practical difference in the solipsist's behaviour, does not logically differ from the view it simulates in practice.

On pragmatic principles this objection seems sound and insuperable. If a solipsism admits that it must in practice behave as if other beings were real, then it has plainly passed into its other, and can no longer boast of a separate existence: it has suffered the same fate as an offensive ghost which, according to Plutarch, once made itself a nuisance in the Platæan territory. When it declined to yield to entreaty or exorcism, the Platæans simply caused an image of it to be placed over the spot it haunted, and then, though no doubt it continued to occupy the same space, it was no longer a supernatural, but merely an æsthetic, eyesore—a hideous statue being something wholly natural. To any solipsism, on the other hand, which will not in practice admit the existence of other minds, the sufficient reply is that it is impracticable. And the fact that neither of these retorts constitutes a conclusive refutation of Solipsism in the eyes of philosophies which have assumed a different conception of the relation of theory to practice, leaves Solipsism a thorn in the flesh (or perhaps a squib in the vitals) only of those other philosophies.

[1] *The Dissociation of a Personality* (1906).

II.—PROFESSOR LAURIE'S NATURAL REALISM.[1]

By Professor J. B. Baillie.

II.

The Ontology of Natural Realism.

The meditations in the second volume of the *Synthetica* are exclusively devoted to the consideration of two problems—the nature and meaning of Ultimate Reality, and the place in that Reality of man's individual existence. While these problems are necessarily connected in every way, they are treated as distinct. And rightly so; for it is difficult to say which, in a speculative interpretation of experience, is to be taken as logically prior. From one point of view doubtless the solution of the first problem is determined by the significance assigned to man's individuality in the whole: from another point of view it is equally evident that the meaning of Ultimate Reality determines the solution of the second problem. In Prof. Laurie's arguments the problems are so interrelated that it is only by a process of abstraction that they can be discussed separately.

The meditations are described as ontological in character. But this does not mean that the epistemology contained in the first volume is merely to be treated as a ladder to be thrown down when we have reached the height of speculative vision. The epistemology remains with us throughout the ontology, both in the sense that the ontological synthesis is a kind of knowledge, and in the sense that the conclusions of the epistemology now reappear as elements in the composition of the specific meaning of the Absolute as such. The results of the epistemology are, in fact, recast in the interests of an "absolute synthesis".

We are here dealing with a different object of knowledge, and an object of a very peculiar kind. At the outset, therefore, two preliminary questions regarding Prof. Laurie's method must be considered. What form of knowledge is to

[1] Since the following article went to press the distinguished author of the *Synthetica* has passed away. It was the hope of the writer that some reply might have been made by Prof. Laurie to certain criticisms the article contains. But there seems no reason for making any change in the form or substance of these criticisms, now that a reply is unhappily no longer possible.

be adopted for the attainment of this "absolute synthesis"? And to what extent does the subject-object relation characteristic of knowledge still hold in the case of an "absolute synthesis" which ostensibly transcends finitude?

On the first question, Prof. Laurie's statements seem at first somewhat ambiguous. Prof. Laurie leaves us at the end of vol. i. still within the region of finite human knowledge, with the conception of rational synthesis analysed, and the potencies and limits of systematic reflection delineated. Such reflection is confined to the interpretation of phenomenal reality, and merely brings out in connected form the substantial content of the individual. He has not yet discussed the stage of "rational intuition," the highest level of knowledge. But he goes so far as to say in vol. ii.[1] that this highest level or kind of knowledge is not found in our finite experience, though it is a "probable level of being".[2] This position is difficult to maintain, for otherwise where is the source of our knowledge of what is transfinite to be found? 'Rational intuition' is the only remaining type of cognitive activity to which the knowledge we want could be assigned. And this is really admitted to be the source of the higher synthesis. For our author declares[3] that the "activity of mind" by which we "behold" "Being Unconditioned" as the "One of all Actuality" is "to be called Intuition": here "we see all in God". With this statement too may be compared the expressions used in the opening paragraphs of the volume,[4] where Prof. Laurie points out that insight, vision, is the end of all cognition, and the function by which we apprehend Ultimate Reality. There does, in fact, seem no other way than that of "rational intuition" by which the absolute synthesis or ontology could be furnished; and the apparent inconsistency in maintaining that "rational intuition" is not ours, and yet is the condition of an absolute synthesis, can only be verbal in character if our author's position is to be intelligible.

The organ or function of rational intuition, which is the highest reach of knowledge, being thus the means of supplying us with our ontological synthesis, it is evident that the method of this synthesis cannot consist of a series of demonstrations. Demonstration in the sense of proof is out of the question;[5] all we can do is to "indicate," "contemplate," "unveil" or "reveal" the content and nature of the Absolute. This is not merely necessary, it is sufficient for the

[1] *Syn.*, ii., pp. 54-55. [2] *Ibid.*, p. 56.
[3] *Ibid.*, p. 193, *cf.* precisely similar expressions on pp. 195-196.
[4] *Ibid.*, pp. 1-2. [5] *Ibid.*, p. 2.

purposes of knowledge, on Prof. Laurie's theory of knowledge. It is necessary, because in dealing with the Whole, the "One-All" as such, we cannot proceed by employing a function of knowledge which deals ostensibly with parts of experience *quâ* parts, which analyses and "comprehends" these under the *assumption* of, but not by explicit reference to, the Absolute: we can only make use of a function which, while implying, yet transcends such a stage of knowledge, and which, being the end of all knowledge, deals with complete unity as unity, views the whole as a whole and in a single act of knowledge. And it is sufficient, because this final function of knowledge gathers up all the varied meaning of reality apprehended by the subordinate levels of knowledge, brings all these varied meanings to a single focus, shows them to be phases of a single unity, in short reads them in the light of, and recasts their contents in terms of, the one unity which they all severally imply and together exhaustively express, so far at least as man's plane of being is concerned. Beyond what the various levels of knowledge convey the Whole has no meaning for man; to gather up and focus all this meaning *is* therefore to reveal the Whole as a whole. In a sense, then, this supreme intuition does not give us anything new,[1] unless the vision of the unity as such be something new. To see the unity as a unity is thus sufficient for the apprehension of the Absolute and for the purposes of knowledge.

It is important to observe at once that the intuition is not a mere subjective process of finite mind without an objective counterpart. It seems indeed to involve an annihilation of that distinction of subject and object on which knowledge rests, and which is the foundation of our author's epistemology. But in point of fact it is the culmination of knowledge, and for that reason alone cannot contradict the essential nature of knowledge. If the lower levels of knowledge have objectivity and 'reality,' most certainly the highest must have: and since knowledge is an expression of reality in the lower stages, it must be so all along the line. In fact it would be paradoxical to say that subject and object imply each other at the lower levels of knowledge, but that when we get to the highest the objective aspect suddenly slips from our grasp; and still more paradoxical to say that intuition has no objective content when the Absolute it professes to reveal is the very ground of the objectivity in all the pre-intuitional levels of knowledge. Intuition is merely the

[1] *Syn.*, ii., pp. 196-198.

highest point of fusion of subject and object in human knowledge. Moreover no matter how complete the fusion, the distinction of subject and object is still maintained; for, as our author points out, the vision, the intuition still implies an act of 'will' on the part of finite personality,[1] and thus preserves in a certain sense the essential distinction of subject and object.

But when so much is said regarding this function of intuition, we must not forget that there is an important distinction between an intuition of the Absolute and an intuition by the Absolute. Rational intuition which makes possible ontology is the consummation of the knowledge of finite human mind, and remains within the limits of the "man-plane" of being. This intuition of the Infinite Whole is a function of the finite being; it is a finite intuition. It can only produce an "absolute synthesis," not a "synthesis of the Absolute". But while the intuition of the Infinite is not an Infinite Intuition, it is equally important to bear in mind that a finite intuition is not a mere intuition of the finite. Man's mind does transcend in a real sense the bounds of finiteness, but only does so in a certain way: the restriction lies not in the fact of doing so but in the extent and degree to which he can do so. He only does so in such a way that what he says or sees of the Absolute is necessarily abstract, general and, as we may put it, perigraphic in character: it is never comprehensive and complete. What man says is, as we shall find, none the less absolutely true and universal: it is neither merely symbolic nor merely diagrammatic.

The consideration of the second preliminary question above mentioned—the consistency of an "absolute synthesis" with the subject-object relation characteristic of knowledge—brings out a serious difficulty in the argument. On Prof. Laurie's view, subject and object are indissolubly united in man's experience, and, as we saw in the previous article, are both necessary for the attainment of knowledge. But the Absolute is described in the course of the ontology as the "universal Object" which "includes man":[2] it is the "absolute Actuality" which becomes "subjectively" what man finds it to be:[3] it is the "synthesis of one and many," the many of which each man is a unit: it is the synthesis of "noumenon and phenomenon,"[4] whereas man's individuality and experience have their being amidst the negations which constitute phenomenality. In other words, the ultimate object of man's knowledge is at the same time the ground of all his

[1] *Syn.*, ii., p. 196. [2] *Ibid.*, pp. 59-60.
[3] *Ibid.*, p. 62 ff. [4] *Ibid.*, pp. 58, 69.

experience, and contains man as a certain type or plane of being. It seems clear from this statement that the *relation* of subject and object as constituting man's experience, the relation of subject and object at man's plane of being, falls within the Absolute. How, then, can the Absolute be termed a 'universal object,' since object is always relative to subject and, in the present case, the subject is contained within this "universal object"? And even if this be understood, to whom is that universal object now relative, when man's subject has, by hypothesis, fallen within the 'universal object'. Is the Absolute at once universal subject and universal object? On this last point Prof. Laurie seems in one passage[1] to hint that the Absolute is both Subject and Object: "the universal Subject is Absolute Being as immanent purposely determining itself," while "objectivity" (as a whole) is "subjectivity externalised". But this still leaves the first point unsolved; and even, in a manner, increases the difficulty; for we cannot see what the relation is to be between the 'universal object' as such and man's 'object' on his specific plane, nor what the relation is between the Absolute as Universal Subject and man as subject. If man's experience, subject with object, falls within the one Absolute Synthesis, it is difficult to understand why such a synthesis should be called an "object" at all. If, however, it is not an 'object' to man, then it is impossible that it can be apprehended in any sense that is relevant to man's experience. While, finally, if the Absolute "in its lonely self-identity" is a universal object to itself as Universal Subject, then it seems illegitimate to treat man's experience, man's plane of being, as falling solely within the universal object; it must also in some sense have to do with the 'Universal Subject'.

From the fact that Prof. Laurie has not discussed this difficulty,[2] we may assume that it is not so insuperable as it at first sight appears, and that it does not seriously imperil the coherence of his argument. If we take the phrase 'universal object' very literally, and insist on the object being kept rigidly distinct from the subject, in the way Prof. Laurie has maintained in the first volume, then no doubt the difficulty just mentioned may well seem insuperable. Nor can we urge in defence that there has been some looseness in the phraseology adopted. For it is certain that the Absolute must include the finite subject, and it is equally

[1] *Syn.*, ii., p. 75.
[2] The paragraph on p. 278 hardly meets this difficulty.

certain that if the Absolute is to be known at all it must in some sense be an object, the "universal object".

We may perhaps escape from the difficulty in this way. The ultimate question really is whether the Absolute as such can be an object at all. If it can be an object for a finite subject, then the problem as to its being known is at once solved, on Prof. Laurie's theory; for given a subject-object relation *ipso facto* we have knowledge. Our author is of course far from committing the obvious fallacy of asserting that the Absolute is an object and so can be known. On the contrary, he insists that the Absolute in its totality cannot be known by man: a "synthesis of the Absolute" is beyond us.[1] The Absolute in a certain sense is thus not an object at all for us. At the same time "All is One," and our finite individuality exists within the "one-all". The forms which the subject-object relation sustains within our experience are thus within this "one-all," and *are* the Absolute at our "plane of being". This was established in the epistemology. Hence the object world we find or form in the course of knowledge is the Absolute as finitised in the various moments or stages of knowledge; and at these various stages the Absolute is as completely known as our subject-activity is capable of knowing it. Thus the Absolute is our object only in the sense in which the various stages of knowledge, formed as a matter of fact in finite experience, possess an objective content. In other words, when we are realising the function of knowledge in any of its forms, we are expressing the nature of objectivity, and to express objectivity truly is to reveal the Absolute. Only to that extent is the Absolute our object in so far as in finite experience the subject-object relation is found as a matter of fact to hold. Beyond this we do not know, and in any other sense the Absolute is not our object at all. What we know in finite experience is indeed truly known, and is the concrete realisation of the nature of the Absolute "at our plane"; and so far the Absolute is truly our object. But beyond that there is no knowledge and no object. To this, there is one qualification, which Prof. Laurie is at pains to emphasise. While we know nothing of what the real nature of the Absolute is outside the above limitations, we do know that our finite individuality is within the "all-one," and that this "all-one" is the whole, a "transcendent" whole immeasurably beyond us.[2] But all that this knowledge amounts to is the bare fact *that* there is such a whole—a fact of vast import-

[1] *Syn.*, ii., pp. 32, 50 ff. [2] *Ibid.*, p. 50 ff.

ance doubtless, and one which delivers us from the perils of mere pluralism, but not a fact whose fullness of content can possibly enter our reflective experience. It is a fact that enters knowledge in the form of feeling, and is only present at the emotional level of experience.

We may perhaps point the contrast between the epistemology and the ontology of these "meditations" by saying that in the former our author reads the meaning of human experience from the point of view of the subject, and finds it consisting of certain kinds of truth about the Absolute; in the latter he reads the same experience from the point of view of the object and finds it consisting in certain kinds of content of the Absolute.

What we have above stated regarding the all-important question of method has partly anticipated the development of the argument in the ontology. It is clear that such a way of approaching the problem of the nature of the Absolute very closely resembles the method of anthropomorphism: it is equally clear that the method does claim to supply objective universal knowledge of the Absolute. In stating the content of the notion of God, Prof. Laurie frankly takes the finite as the "necessary *ποῦ στῶ*," [1] and therefore has in some way to furnish this objective knowledge in spite of the apparent limitations which anthropomorphism implies. It is thus not surprising that at an early stage in his argument he finds himself constrained to face this problem and to discuss the significance of anthropomorphism.[2] As a matter of fact he keeps this problem in view throughout his whole argument in the ontology. And he must do so; for undoubtedly his interpretation of the nature of God and of the relation of finite individuation to the Absolute is controlled from first to last, as we shall see, by what constitutes and determines the nature of man's life.

From anthropomorphism he admits there is no escape.[3] The only question is, does this prevent us from attaining positive and objective knowledge of God? The term anthropomorphism almost invariably implies a limitation, not merely in the extent of man's knowledge of the Absolute, but in the quality of that knowledge. This restriction is very often taken to mean that any kind of statement about the Absolute, because derived from man's human apprehension, must be the expression of his peculiar needs and nature, and therefore is bound to ascribe to the Whole a character and content admittedly peculiar to a part of that Whole, *viz.*,

[1] *Syn.*, ii., p. 55. [2] *Ibid.*, *Med.* 2. [3] *Ibid.*, p. 27.

man. If we are to admit any statement as necessary or legitimate for certain purposes, it is asserted that we can do so only on the understanding that the result be regarded as symbolic at the best, and for the most part as illusory.

Prof. Laurie does not directly meet this conception of anthropomorphism, which would certainly be fatal to any objective knowledge of God. He circumvents it by a line of argument as ingenious as it is penetrating.

The above conception of anthropomorphism rests on the position that the knowledge of God is a separate process of knowledge which takes place when man, it may be at the end of his knowledge of the finite facts of experience, asks himself the question what God means. Before this question could arise, it seems assumed, he must have known other things, things which he may know with complete certainty, but among which there is no such object as that of God. To face the question what is God is thus to face a new, unique, and distinctive object of knowledge. But since the only kinds of knowledge he is used to, are those which deal with perception and inference, he will proceed in dealing with this new object too, by way of perception or inference, or both. Hence, on the one hand, the so-called "proofs" for the existence of God are brought forward as the only way of answering the question put, and, on the other, it is pointed out that, since even the very idea of proof starts from our finite human experience and its needs, the attempt to apply to this unique transcendent object the terms, methods and results which any such process of proof involves, settles *ab initio* the essentially inadequate character of any conclusion we may draw or statement we may make.

Prof. Laurie corrects the cardinal assumption on which this whole view rests. The Absolute, as he maintained in his epistemology, is the ultimate object of our knowledge all along the line of experience, whatever the kind of knowledge may be and whatever stage of knowledge we take. And here, in vol. ii., he repeats that the "need and quest for God" is the goal of all man's striving towards the attainment of his end in the plane of being which he occupies. Man's very consciousness of his "singleness" of being carries with it a sense of "dependence"[1] on an unconditioned ground, a Universal-Being; for only so could the 'isolation' and 'solitude' of his being be supported and maintained. This sense of 'dependence,' or of 'oneness,' is in its simplest form only found in feeling, but it none the less carries reality with it;

[1] *Syn.*, ii., p. 8.

it is a feeling of oneness with all being, and this remains with man from one end of his conscious experience to the other. The "objectivity" characteristic of knowledge at any stage, the "necessity," or again the "universality" of knowledge is in every case constituted by the same ultimate Reality; for the activity of reason involved in establishing such knowledge is the realisation in man of the nature of the Absolute. Hence we are not facing a new and separate object when we seek to know the Absolute as such; we are merely reconstituting and reaffirming at the highest stage of knowledge, an object that has been with us, and is with us, at each of the distinct levels of knowledge which our experience contains. And, therefore, in the second place, our knowledge of God specifically is only anthropomorphic in the sense in which all our knowledge of anything whatever is anthropomorphic. In other words, our knowledge of God is not anthropomorphic in any sense which precludes it from being objective and universal. Partial and general, a mere 'outline' our knowledge of the Absolute may be and is; but a partial thought is not an erroneous thought.[1]

Moreover, the mental necessity to look at our experience as a whole is just as well founded as that which compels us to know any part of it. We may say, in fact, that the 'universals' of thought in knowing are the points of arrestment in the process of satisfying that mental necessity which lies behind the process. This necessity comes from our being aware of our existence as individual parts of a Whole. That our knowledge of God should be progressive thus lies in the nature of the case:[2] it means no more than that our knowledge is an activity of a type of being that grows towards its end. But our knowledge is none the less valid at each stage of the progress; and the progress is not radical change, but alteration of a conception that remains in its essence the same in the least and in the most advanced type of mind.[3]

Further, we cannot rest satisfied in the mere fact that our knowledge has or may have objectivity and necessity. We must interpret for ourselves this objectivity characteristic of knowledge, so as at once to show its source in what is beyond ourselves, and at the same time account for its compelling force in ourselves. The problem, in short, is not so much whether by our knowledge we know God, as to give an intelligible account of the fundamental character of our own knowledge.[4] In our knowledge we are carried beyond our-

[1] *Syn.*, ii., p. 30. [2] *Ibid.*, pp. 7-23, 30. [3] *Ibid.*, pp. 20-21.
[4] As our author says, p. 70, the 'knowledge of knowing is knowing God'—precisely the position adopted by the post-Kantian idealists.

selves: What is this "beyond ourselves," and how can we express it? Prof. Laurie answers the question by simply synthesising the objective aspects involved in our experience, unifying them into one single totality, which thereby constitutes and determines the knowledge we actually have. So interpreted the Whole as such merely expresses itself in man's activity on his plane of being; the Whole or Absolute "subjectivises"[1] itself in man's mind, and thus gives his knowledge that objectivity and necessity which it possesses as a fact.

At first sight it would seem as if the objectivity of man's experience were here simply taken *per se*, were treated as a separate fact, and then straightway identified with God or the Absolute, the source from which man's experience arises and to which that experience returns. But such an obviously mechanical and external relation between man's experience and God Prof. Laurie is far from adopting. The relation between man's knowledge and God is as intimate as the relative holding between subject and object within any region of the finite. As subject and object in the latter case are continuous and inseparable, so man and God are continuous and inseparable. This is the essential principle of the argument. But it introduces a certain ambiguity. The ambiguity appears in the statements Prof. Laurie himself makes. At one time the Absolute is spoken of as the "unity of man's experience—the sum of the Actual on the grade and within the orb of finite man-mind":[2] God is the "reflection of the distinctive man-being himself":[3] God is the "sum of ideals".[4] At other times again the Absolute as a totality is held to be "transcendent,"[5] "infinite" and "immeasurable," and as "immanent and unconditioned ground"[6] the system of "individua"[7] of which man is one.

The ambiguity here is more one of expression than of principle. God is not taken to be either the mere hypostatisation of the objective content of man's experience viewed as a whole, nor simply the reality left over after man's specific experience is exhausted and complete. Prof. Laurie's point is that the unity or totality of man's experience is God *for man;* but that this very experience is at the same time consciously conditioned, related to what transcends its individuality, and so implicates the unconditioned whole of Being. All planes of being are continuous with one another, and the one Absolute is immanent in each and all. The continuity

[1] *Syn.*, ii., p. 45. [2] *Ibid.*, p. 49. [3] *Ibid.*, p. 27.
[4] *Ibid.*, p. 110. [5] *Ibid.*, p. 50 ff. [6] *Ibid.*, pp. 86-87.
[7] *Ibid.*, p. 64.

is no doubt the most general feature of the Absolute, and as such has no more content than that of bare Being, or "being unconditioned" as our author calls it. But this continuity is a component constituent of each plane, along with all the other content that makes up the concrete fullness and specific character of each stage. Hence, while to each plane God is primarily the complete realisation of that plane, yet God is not, even to that plane itself, confined within the four walls, so to say, of its individuality, but is also that continuity of being which unites all planes of individuality. Thus, in man's case, God is the unity of man's experience in the first instance, or man "receives the totality of God at his plane";[1] but within man's conscious experience there lies this continuity with all being as a fact, a fact of 'feeling,' a 'felt continuity'. Hence God is for man this continuity of man's being with all being *as well as* the concrete fullness which constitutes man's specific plane: God therefore means to man both the totality of man's own experience and the continuity of man with all being whatsoever.[2]

These two essential moments in the meaning of God are distinguished as the immanence and the transcendence of God. The immanence of God in man's life is simply God as realised in the total range of man's specific plane of being, or, as we may say, God humanised: it means 'continuously repeated pulsation' throughout all the manifold activity of his life. The transcendence as such is for man *God's* concrete reality as realised in planes and forms of being other than man's. Since God is the "Absolute Whole," the Absolute is the immanent substance of *all* planes and kinds of being, of all individua. The distinction between immanence and transcendence is one which has validity only from the point of view of the individual planes of being. From that point of view they are aspects of Absolute Reality. But to the Absolute *per se*, so to say, the only essential function is that of immanence. Transcendence is entirely relative to a given plane of being, and only holds as between one plane of being and other planes. In other words, the Absolute is not transcendent to Itself; but solely immanent. The Absolute is transcendent only for a specific individual type of being; for that concrete content of the Absolute, in virtue of which and

[1] *Syn.*, ii., p. 59.

[2] The history of man's religious life confirms this analysis, for now the former is emphasised and now the latter: when the former is emphasised to the exclusion of the latter we get *forms* of religion that are crudely anthropomorphic: when the latter is exaggerated we get the most abstract attitudes of religious mysticism. *Syn.*, ii., pp. 111-112.

in regard to which It is transcendent to a given plane of being, *e.g.*, to man's plane, is immanent in the other planes of being.

To man's apprehension, then, God is both immanent and transcendent. We apprehend God as both, but the apprehension in the one sense is different, almost in kind, from that in the other. It is only in regard to the former that we can be said to know God at all; it is indeed only as immanent that we want to know God.[1] And God can be known in this sense;[2] in fact, since God immanently constitutes the very universals of man's knowledge, we may be said to know nothing else but God as immanent. God "speaks through man"; the God of man is God-man:[3] and the knowing of man's own knowledge is the knowing of God.[4] But as transcendent we can hardly be said to 'know' God at all: we merely apprehend 'that' God is but not 'what' God is *quâ* transcendent.[5] We only know God as finitised in our own human experience. All the rest is immeasurably beyond our grasp. To know *that* God is transcendent is no doubt much, and we apprehend this much in 'feeling': but it is entirely unequal to the fullness of God's Reality *quâ* transcendent. If we could know God both as immanent in our experience and as transcendent we should contradict our own nature.[6]

Thus the above ambiguity referred to is removed by this theory: we are delivered both from the sinister limitations of anthropomorphism and yet confined, for all the satisfactory knowledge of God we have, to the 'totality of man's experience'. By the line of thought above indicated we are directly led to the interpretation of the positive content of the notion of God. It is impossible fully to convey in a few sentences the range of ideas covered by the profound analysis of this conception given in Meditations vi.-xi. But the main elements can be stated in such a way as to be intelligible in spite of brevity.

"If I am exiled from God, how can I hold converse with Him? If I am in identity with God, how could the question of God ever arise?"[7] In this sentence, typical of so many in Prof. Laurie's analysis, there is indicated the ultimate factors involved in the notion of God. God is One, and the same One, in all phases and forms of reality; but finite individuation, distinct, nay, separate from this one, is equally an essential moment in the Absolute. As one, God is Being-

[1] *Syn.*, ii., p. 94. [2] *Ibid.*, pp. 59-62. [3] *Ibid.*, pp. 30-33.
[4] *Ibid.*, p. 70. [5] *Ibid.*, p. 85. [6] *Ibid.*, p. 52.
[7] *Ibid.*, p. 68.

unconditioned, the ultimate continuum, the all-pervading substrate of the conditioned many, which our finite experience reveals to us as inexplicably 'given'. This Unconditioned Being is directly apprehended in feeling at the basis of our experience, and is directly reaffirmed in intuition as the final achievement of human knowledge. It is the first and the last moment in the conception of God. But the dialectic activity of reflective intelligence, of "will-reason," affirms the positive existence of the independent individua, the distinctions and connexions amongst which it seeks to establish. Without such individua its movement could neither begin nor end. Their distinctiveness is implied in its very process, and that process is the necessary development of the life of mind. The independence of finite individua, and the positive subsistence of the conditioned, are thus as ultimate as the unconditioned unity and continuity of the Absolute revealed in feeling. The 'separateness,' 'limitation,' 'conditionedness' of individua is due to the factor in the Absolute which our author calls 'negation'. An individuum is the union of affirmation and negation, and these are indissoluble moments in its composition. The individuum insists on the one, just as much as the other: it must 'affirm' to be an entity at all: it must 'negate' so as not to be anything else but itself. It is the Absolute in it that affirms its being; it is the Absolute that equally compels it to negate, by giving it a specific character and content to affirm. The sum of individua gives us the "many" of the universe. The totality of the individua is the 'phenomenalisation,' the 'externalising' of God. But however essential individuals are to the life of the Absolute, they are not as such, nor is the sum of them,[1] the Absolute. They are the Absolute in the form of 'difference,' in virtue of its function of negation. Finite individua are God's 'opposite,' God's 'other,'[2] 'they are and they are not' God, or, as our author characteristically puts it, they are 'God and God-not'.[3] The first and last word about the Absolute is unconditioned Being, continuous and one. Of this all individuation is an expression. The Absolute as such is solely affirmation; the Absolute is *present* in negation as 'Being': but negation is a qualification of individua only. Hence God is not an individual.[4]

Again, because the Absolute as pure affirmation is the positive substance of individua, the plurality of individuals is not the mere emanation of the Absolute; the Absolute is 'immanent'[5] in individua, It is their being. *Quâ* immanent God is

[1] *Syn.*, ii., p. 67. [2] *Ibid.*, p. 75. [3] *Ibid.*, p. 67.
[4] *Ibid.*, p. 64. [5] *Ibid.*, pp. 66, 86, etc.

in the world, not merely the external 'creator' *of* the world. In this aspect individuals in affirming their own nature are affirming God's being: they are 'on the side of' God, are, *e.g.*, in man's case, 'co-workers' with God. They do not therefore exist so much *for* God simply; they exist *for* themselves: or rather in existing for themselves they exist *in* God. This is what Prof. Laurie means by his 'monistic pluralism,'[1] which he holds to be distinct from pantheism or from mere pluralism. On the other hand, in virtue of the factor of 'negation,' which is inalienable from the nature of an individual, the individual, so to say, subsists in his own right, even it may be as against the Absolute. To insist on the element of negation is just as necessary as to insist on the positive content. In the exercise of the function of negation the finite individual is quite capable of, and in a certain sense cannot help, 'resisting'[2] God. This expression is no metaphor in Prof. Laurie's theory. It is taken quite strictly and literally, and is regarded as the logically necessary consequence of negation being constitutive of the nature of the individual. We shall see the part it plays in the discussion on immortality. Meantime it is important to notice that negation is an element of opposition (not necessarily contradiction)[3] inherent in all finitude. Only by negation, in fact, is finitude to be 'saved':[4] saved, that is, from ultimate or approximate annihilation in an Absolute which is a mere neutrum. To 'save finitude' therefore is essential even in the interests of the Absolute; for only so, is It a concrete Absolute, instead of a mere abstraction. Negation brings with it what Prof. Laurie calls 'cosmic sin'; it brings 'casualty,' 'contingency,' 'disorder' into the world.[5] But these are 'facts' which have to be reckoned with, even though they may not be attributed to the Absolute.[6] With all the difficulties involved in the fact of negation, it is better to admit that finite individuals can and do 'resist' God and 'God's purposes,' than accept the conception of a 'fated world'.[7]

When we ask what further God means for man in particular, as distinct from what God is in individuals in general, the answer is easy to find. God is immanent in man's individuality, for man is one amongst many individuals; and God is there the positive substance and source of man's nature, in the sphere of feeling as well as the moving principle of the dialectic of 'will-reason'. . God is immanent in all the life of feeling, 'the basis and terminus of mind';[8] in the higher forms of

[1] *Syn.*, ii., p. 76. [2] *Ibid.*, p. 75. [3] *Ibid.*, pp. 133-134.
[4] *Ibid.*, pp. 75, 99. [5] *Ibid.*, pp. 82, 128. [6] *Cf. Syn.*, ii., p. 128.
[7] *Ibid.*, p. 82. [8] *Ibid.*, pp. 123-125, 117 ff., 130 ff.

'rationalised feeling' which we have in the sphere of artistic beauty, in the system of rational comprehension, evolved from the basis of sense life, in that harmony of man's emotional life which is the consummation of his moral activity. God, in short, is the End in the form of Beauty, Truth and the Good; God is 'perfection,' the 'sum' of human 'ideals'.[1] Feeling is the basis of experience in the case of 'art,' 'knowledge' and 'morality'; and God is present in feeling: the end is the ground of all these processes; and God is that end. God 'affirms' these ideals as man's true being, as constitutive of man's nature.[2] God is thus 'mind' in all its grades, and is not mere 'reason' or 'thought'. God indeed is more present as feeling than as thought, which is the 'servant of feeling,' the servant by 'being master' of feeling.[3] And, again, God is self-conscious, is ego or spirit; but in an 'infinite sense'.[4] God must be at least as concrete as any of the finite individua, and, being immanent in man who is self-conscious, spirit, God must be in that sense self-conscious spirit. But God is not any individual, even the highest we know, *viz.*, man. Hence the qualification in an 'infinite sense'. For a similar reason God is 'personality,' but not *a* personality.[5]

These, then, are the primary moments in the conception of God. They are necessary and sufficient to justify the religious life, which is the 'personal emotional attitude to the highest,'[6] the sole basis of which is the 'feeling of God' (not the recognition of the fact of God),[7] and the consummation of which in a 'thinking man's religion' is 'his philosophy vitalised by feeling, and inspired with emotion'.[8]

Before passing to consider Prof. Laurie's meditations on the problem of evil and the problem of immortality, we may pause to make a comment which will partly anticipate any further criticism of his views regarding these problems. It is extremely difficult, in the light of Prof. Laurie's own statements, to accept without qualification his conception of an Absolute 'resisted' by finite individuality. One cannot but have every sympathy with his attempt to maintain the claims of finitude in the system of things. And as a matter of principle it is undoubtedly sound to treat the problem of human individuality as a particular case of the general question regarding the nature of finitude; for what holds of finitude in general will be true of the human individual.

[1] *Syn.*, ii., p. 110.
[2] *Ibid.*, pp. 133-134, 142.
[3] *Ibid.*, pp. 138-139, 98-100.
[4] *Ibid.*, p. 176 ff.; *cf.* p. 94.
[5] *Ibid.*, pp. 27, 96-97, 177.
[6] *Ibid.*, p. 17.
[7] *Ibid.*, p. 130.
[8] *Ibid.*, p. 142.

Negation is doubtless supremely important and may rightly enough be held to 'save finitude': but it is pushing the function of negation, and the claims of finitude, too far when he speaks of the finite individual as 'resisting' God. He states expressly that we cannot understand negation any more than we can understand being:[1] that our knowledge even of individua is surrounded by ignorance:[2] and he insists that we have no 'synthesis of the Absolute,' but at the best only an 'Absolute synthesis'. He holds, too, that affirmation, which the Absolute essentially is, 'overpowers' negation in such a way as to make an orderly whole of all the strivings and oppositions of finitude, and to realise in the long run the end or 'idea' immanent in each finite individual:[3] that differences are not absolute differences:[4] and that 'negation negates itself'.[5] Add to this that he repeatedly asserts that God is in large measure incomprehensible, and that even our reason at its best has to be supplemented by a 'faith' which anticipates the goal of reason and is its consummation[6]—and surely, in the light of these various expressions, we are not entitled to admit the position that 'resistance' of the Absolute is either an essential attribute of finitude or a consistent interpretation of the nature of the Absolute. 'Resistance' as a necessary and essential attribute implies an opposition that never is and never can be overcome: whereas Prof. Laurie's positive assertions regarding the Absolute, combined with his admission of the vast field of ignorance regarding the Absolute which surrounds any knowledge we have, precludes us from maintaining such a doctrine. It seems certainly paradoxical to 'save finitude' at a price which destroys all hope of that reconciliation with the Whole wherein lies the peace that comes of understanding.

The danger of this over-insistence on the element of negation appears very forcibly in our author's treatment of the question of evil and the problem of immortality. These two may be conveniently taken together. For, in a manner, we may look upon the meditations on these topics as respectively the development of the implication of the negative and affirmative aspects of human individuality. Evil in all its forms is the result of the negative element specifically; immortality is ultimately due to the affirmative element in human individuality. In Prof. Laurie's treatment, however, the aspects are discussed as if they were separable; but the result of his discussion is to show that the latter is necessary to

[1] *Syn.*, ii., p. 100. [2] *Ibid.*, p. 79 ff. [3] *Ibid.*, pp. 78, 115.
[4] *Ibid.*, p. 81. [5] *Ibid.*, p. 83. [6] *Ibid.*, p. 137.

supplement the consequences of the former, that immortality is demanded by the very existence of evil in experience. No doubt the two aspects are distinct; but on his own showing they are not separate; and to separate them for discussion creates quite unnecessary difficulties in his treatment of these topics.

He introduces the problem of evil by again emphasising the fact of negation as constitution of the sphere of finite individuality. Negation is the *principium individuationis;*[1] all determination is a synthesis of affirmation and negation: individua are the union of opposite factors, foci of contradictory elements. This is true, not merely of individuals in the Whole, but also of the constitution of each individuum, whether 'thing' or 'man'. The component elements of each are opposed to the unifying 'idea,' which is the complete meaning or end of each; they resist the attainment of this 'idea'; they are, relatively to the idea, the negation of it.[2] This resistance, opposition, negation, operating in each individual and among individuals *inter se*, if allowed to have its way, leads to chaos and confusion. And, but for the priority of affirmation, the controlling agency of the end or idea in each individual, and ultimately of the Absolute as the affirmative idea in each and all, chaos would be the result of this necessary resistance. In any case the opposition is irremovable, even though the idea or end is triumphant, and is the source of casualty and contingency in the finite 'created' world. Strife is of the essence of individual existence, a striving to attain the ideal end through incessant opposition. In this activity the Absolute is involved; the affirmative element, and the ultimate triumph of the idea, *mean* the immanence of the Absolute in the individual, whether inorganic, organic or man. The striving of the creature is at the same time the striving of God.[3] God, so to say, has realised so much of absolute reality in each finite centre, *e.g.*, man, and that finite individual affirms or reaffirms this much on his own account and for itself. The individual strives against the Absolute, but the Absolute also strives *in* the individual. The negation is *in* the Absolute; and hence the seriousness of the struggle and its issue.

It follows from this intimate association of the Absolute with the struggle of the finite that the judgment on the result cannot be one thing for the individual and another for the Absolute. The process must be judged as we find it, at the "man-plane of being," to use our author's expression.

[1] *Syn.*, ii., p. 264. [2] *Ibid.*, p. 265. [3] *Ibid.*, p. 267.

Now it is transparent that the process of finitude reveals contradictions unreconciled, more or less constant disorder, contingency and even anarchy. Hence Prof. Laurie concludes that the Absolute does not succeed in realising a harmony of reality, at least so far as the actual plane of being, which man knows, is concerned.[1] There is an irrevocable element of the 'non-rational' in things as we know them: God is in process of attaining His end or idea, but so far He has not yet attained it. Not that the contingent irrational element is to be strictly attributed *to* God: it is the individual's doing: it merely *opposes* God, but does so by the very conditions of God's creative method. The Absolute is thus the *source* of the contingent of evil, though not the *author* of it.[2]

What applies to individual existence in general applies with full force to man's individuality in particular, where, indeed, we see opposition, negation, taking a peculiarly unique and intense form—individual freedom. This freedom, says our author, is the 'standing protest' against abstract monism,[3] the typical and highest mode of asserting the rights of individuality. Man has to realise his own idea and end for himself, as his own conscious task, a task assigned to, but not performed for, man by the Absolute. Man, like all other individua, contains necessarily contradiction, and this is not and never can be removed.[4] Indeed the higher his individuality the intenser and deeper is the contradiction in his constitution. Man is 'God's greatest, strangest, divinest and most deplorable work'.[5]

It is not difficult to see where, in this theory, evil is to appear, and what its nature is to be. Evil finds its possibility in the fact of negation. But negation *per se* is not necessarily evil or the source of evil: if negation could be overcome at every plane of being, more particularly at the plane of man, or could be removed in the long run and give place to affirmation, it could not be properly designated 'evil'. Evil only appears where negation remains as a constant irremovable factor in the process of individuality; for then it is not an accident, nor an incident in the constitution of the individual, but its necessary destiny. Now we have seen that negation is never removed at our plane of being, that God's purpose is not realised but perpetually being opposed. The permanence of the negation is thus the essence of evil, for then negation militates against the fulfilment of the individual end, resists its true nature, and to that ex-

[1] *Syn.*, ii., p. 266. [2] *Ibid.*, p. 271. [3] *Ibid.*, p. 278.
[4] *Cf. Syn.*, ii., p. 284. [5] *Syn.*, ii., p. 275.

tent lowers or lessens its individuality. The permanence of evil is to be ascribed in the long run to the Absolute, and indicates a failure to achieve its end. Hence our author's definition of evil as "the failure of God-creative to realise the ideal of the individual and of the whole on the plane of being man occupies".[1] He adds as a further definition, that we have evil when 'the process of attaining the end in the case of sentient beings involves unnecessary pain'. But this latter seems a subordinate form of the fundamental principle. The assertion that the Absolute does 'fail,' is primarily made of man's plane of being as this appears in the living present. But since this plane is the only one we now occupy, and the only one we know truly, the assertion is held to be absolutely true of actual experience as we have it. For given that the Absolute is, as our author holds, a "God of Love," a God whose purpose is the good of all individua, and given the facts of struggle, incompleteness and pain which we find on every side, and there is only one term to describe the glaring contrast between these two and that term is 'failure' on all sides.

The failure or evil is not so great in certain kinds of individual existence as in others. In inorganic existence in spite of conflict 'we have no reason to suppose that the creative end is not attained'.[2] In the organic vegetable world, and the organic animal world, while failure is evident (*e.g.*, a plant does not have always its proper conditions of subsistence, and yet is allowed to be: an animal, again, suffers pain, often needless pain), yet on the whole we may say of both these realms that 'the good' or 'end' is dominant, perhaps triumphant, through conflict and negation, largely in virtue of the individual being subordinate to the species whose end it furthers.[3] Even in man's life "it is false to represent man's destiny here as wholly miserable," 'the good as measured by fruition is dominant in the world'.[4]

But while this is admitted, and in spite of the fact that much of the suffering can be shown to be necessary, yet 'misery and pain are operative to an extent in excess of what is needed to attain the purposed result': and, in man's case in particular, evil is found which is irremovable, inexplicable and entirely unjustifiable. Man is ever inadequate to his own task of fulfilling himself. Nature is too strong for him. His very ideals are impossible of fulfilment, and must ever remain so: they elude him: his very demands make failure necessary and inevitable.[5] In the case of man the Absolute

[1] *Syn.*, ii., p. 286. [2] *Ibid.*, p. 291. [3] *Ibid.*, pp. 293-294.
[4] *Ibid.*, pp. 301-305. [5] *Ibid.*, p. 288 ff.

has failed and hopelessly failed, if we take life as we find it.

In support of this contention our author in Med. xvi. and xvii. brings forward an eloquent indictment against the method by which man's world is controlled and directed, remarkable alike for its grasp of the concrete facts of life, its fearless incisive criticism, and its intense human feeling. His attitude is that of a captive stoic prince of intellect whose dignity is insulted by the scheme of 'government' in which he is forced to acquiesce, and who refuses to give up his claims to the best even when he has to surrender to the worst. He finds no alleviation against the evil in the consolations of a speculative outlook; for this is but man's 'sad distinction of having assigned to him a share in vindicating for God as for himself the supremacy of spirit,' is but a 'fatal power of more fully comprehending the universal sorrow'.[1] Taking our life in time as we find it, the system of things with its needless and superfluous suffering, struggle and pain, is evil, and cannot be justified. Without hesitation, therefore, since we cannot give up the 'irresistible instinct of Hope,' and must somehow 'remain loyal to the God whom we knew in part,'[2] he maintains that the only conclusion we can draw is that "the negation has been too strong for God"; [3] 'God is a spirit but a spirit in difficulty,' 'from which he is slowly extricating himself'.[4] Our task as men is to co-operate with Him, and 'sympathise with Him' in His struggle as He sympathises with us in ours. 'If we are not only fellow-workers but fellow-sufferers with God, we then become reconciled to the universe.'[5]

Such an indictment against the system of things makes man's position as well as God's apparently hopeless; and there would indeed seem something of mockery or something of irony in man's attempt to overcome the defects and imperfections of his own situation by trying to remove those of God. But more remains to be said. Our author has so far taken the factor of negation and evil *per se* as a separate element in our temporal-spatial experience; and perhaps has thrown this so prominently into relief in order to prepare the way for a reassertion of the positive side of individuality which still remains to be considered. His indictment is only true if we confine our attention to the sphere of finite temporal existence. But that existence has a term put to it by the process of the world, and it may well be that this

[1] *Syn.*, ii., pp. 308, 320.
[2] *Ibid.*, pp. 275, 302.
[3] *Ibid.*, pp. 330, 332.
[4] *Ibid.*, pp. 336-337.
[5] *Ibid.*, p. 337.

very term contains at once the condition of putting an end to these dire results of negation, and the suggestion of a further and final triumph of the affirmative factor in human individuality. 'God's honour is concerned' in seeing that 'our ethical perplexities and inevitable failures shall to and for us be ultimately resolved'.[1] The last stage in the process of negation may therefore hold the secret of the ultimate domination of the Good. This last stage, this final term to the negative process, is Death. This, if it is not the 'master-key of the problem' of negation and evil, is nothing but a 'grim sarcasm on man's ideals and aspirations,'[2] a 'profoundly immoral and glaringly irrational event'.[3] Out of this worst form of evil our author draws the secret of the lasting good of the individual: in the most relentless type of negation we are to find the possibility of the completest affirmation: from the extremity of annihilation we derive the hope and opportunity of immortality.

This may at first seem the great paradox of Prof. Laurie's argument. And certainly one feels that if the affirmative significance of the human individual is so great as he insists in his defence of immortality, so great that its reality far outweighs the significance of the worst form of negation, then the previous indictment against the Absolute loses much of its force. For surely if the positive aspect of human individuality is so firmly established in the plan of the Absolute that it can survive the shock of earth's final catastrophe, one may fairly assume that human individuality can not after all be so gravely affected by the afflictions of its mundane career as to justify our author's tirade against the management of the world. And if God can carry man through the ordeal of the portentous negativity of the tomb, and plant him safely and for ever, with all his self-conscious completeness assured, in a realm of eternal life, it seems an extravagance of statement to speak of God being in a 'difficulty' and 'failing' in the accomplishment of His purpose. The truth seems to be that the strength of Prof. Laurie's accusations against the evil in the temporal system has somewhat over-reached itself, if his defence of immortality is to hold good. For if these accusations are true, then we seem hardly warranted at all in supposing that the individuality which is so bad here can ever be improved by a continuance of individual existence, that a God who 'fails' here can ever succeed anywhere else. While, on the other hand, if immortality, with all that this implies, can be established as at least highly probable in

[1] *Syn.*, ii., p. 321. [2] *Ibid.*, p. 314. [3] *Ibid.*, p. 315.

spite of the present evil in things, then there can be no ground for making such accusations against the Absolute as destroy the very basis on which all hope of immortality might rest. Our life's imperfections may be held to demand immortality, but immortality is not to be had by threats. If it is childish to beg for immortality, it is certainly futile to thunder imprecations against the denial of it.

The statement of the arguments in favour of individual immortality in his last Meditation gives Prof. Laurie his opportunity of showing his rare dialectical skill and fine speculative insight in dealing with ultimate problems. Whatever can be said in support of this conception is made the most of in this masterly treatment of a topic, the discussion of which seems as everlasting as the subject itself. It would be difficult to find in the field of philosophical literature so complete a defence of immortality in the sense of individual immortality, and certainly difficult to find this statement surpassed.

We need not rehearse the various 'proofs'. In principle they consist in a sustained effort to justify by specifically distinct arguments dealing with detailed aspects of individuality the general position that the human individual has an affirmative or absolute factor in his constitution. The arguments therefore seem to amount to no more than an emphasis in detail on that positive substance which the individual derives from the Absolute, and which gives him, as our author previously showed, his affirmative content as an individual. All affirmation in individuality means the immanence of the Absolute in the individual. That is a fundamental position of Prof. Laurie's metaphysics. The arguments for immortality are in the last resort different ways of bringing out this immanence of the Absolute in the individual, in spite of the facts of change, negation and evil, which seem to imperil the security of man's substantial nature.

The cogency of such arguments is always tainted by the logical defect which is inevitable when we try to proceed from the parts as such to the whole, or from the whole as such to the part. If we establish the essential importance of different positive factors in our whole nature we do not thereby prove the inherent importance of our whole nature itself; and conversely if we admit that a whole as such has value we do not thereby prove that the same applies to the part. To apply this to the case of immortality. In the Absolute, value and existence are coincident: hence the futility of attempting to 'prove' the 'existence' of the Absolute, for this very proof must imply a contrast between value and existence which does not hold of the Absolute. In the case

of man value and existence are heterogeneous and stand contrasted; so much so that, *e.g.*, in the moral life, existence is determined by and derived from value. Hence we have the attempt, legitimate in the case of man, to demonstrate an essential and necessary connexion between our value and our existence; such a connexion is precisely what immortality means. The basis of the argument is either our value or our existence: in general the basis is our value, when we seek to 'prove' immortality. That value doubtless is permanent, is the 'affirmation' in us of the Absolute. But when, because the Absolute is the complete unity of value and existence, we try to argue that our value involves our existence too, we commit the fallacy of concluding that what is true of the Whole is true of the individual part: or again when we argue that, since our existence is determined by our value and our value is permanent, therefore the permanence of our value ensures the permanence of our existence, we are once more surreptitiously borrowing to assist our own case a truth holding only of the Whole, which by hypothesis we are not.

Prof. Laurie is well aware of the inherent difficulty of finally proving individual immortality, and admits in so many words that 'coercive demonstration is impossible'. He goes even so far as to justify this inherent impossibility, by saying that 'it would have been a contradiction of the essential characteristic of the present system had immortality been put beyond all possible question'.[1] It seems a little paradoxical to make so strenuous an effort, as he has done, to demonstrate that man is immortal, and then to conclude the argument by maintaining that the impossibility of a complete demonstration is itself an additional reason for the proposition to be demonstrated. But the fact is, the proof is impossible not because this is for our good, but because the premises and conclusion must in this case be logically incoherent, for they are heterogeneous. It is ironical to make a merit of our inability to solve a logical fallacy. No doubt the impossibility of proof opens up the way to 'faith' on which he insists as an essential constituent of spiritual life.[2] For what is regarded as 'a postulate of self-conscious ethical activity'[3] can only be practically efficacious through the agency of faith. But so far as the concrete question is concerned,—as to whether the human individual is, as a particular entity, immortal, and what that immortality consists in—this 'faith' leaves the matter absolutely undetermined.

In other ways, too, Prof. Laurie reveals the sense of the insufficiency of the 'proof' of individual immortality. He

[1] *Syn.*, ii., p. 389. [2] *Ibid.*, p. 384. [3] *Ibid.*, p. 388.

points out that 'each Ego has its eternal destiny in its own hands,'[1] and that a given man may not be worthy of immortality at all. "The continuance of life beyond the grave *may* depend on the extent to which the potential in each man has here become actual": 'he who has not found eternal life here will not, it may be said, find it hereafter':[2] 'for aught we know one of the very marks of personal fitness for the life eternal is the living conviction which man has of the necessity and truth of that eternal life'.[3] But a proof which is to be accepted can admit of no qualifying exceptions. The only hope of immortality on the basis of a rational demonstration must consist in the universality of the conclusion. A probable conclusion may perhaps admit of exceptions; but a universal conclusion cannot; and a probable conclusion is not 'proof'. To admit that certain individuals may not be immortal is, once more, to make all logical coherence in the argument from the very start impossible; for we have thereby destroyed the universality of our *premises*, and, moreover, no one can settle what individuals are to be rejected.

The truth is that the only safe ground on which Prof. Laurie's arguments can rest is the general proposition on which he insists so strongly throughout his metaphysics—that being is one and continuous throughout all its manifestations. The permanence of the individual stands or falls with that position. For immortality is a specific case or form of continuity, and the problem of immortality arises in relation to this fundamental fact of continuity of being. The meaning we attach to immortality will depend entirely on the significance we attach to this fact of continuity. Continuity is not merely a matter of time, for time is an aspect of continuity. Continuity may perhaps best be realised through the value and quality of spiritual life, and that is not a matter of time or of particular existence. As Prof. Laurie says towards the close of his great argument, "a man striving after union with God here and now is *ipso facto* making himself immortal, inasmuch as he is bringing his finite spirit within the very life of the eternal spirit, and is being borne along in the current of that which cannot die".[4] This is finely said, and seems the last word on the subject. For thereby we make immortality a quality of the life of the present, a quality essential to the ideal ends controlling the present, and as enduring as these ideal ends themselves. This is all man wants to make it worth while to surrender even his existence in the interests of the best, in the assurance that he is not throwing his life away.

[1] *Syn.*, ii., p. 384. [2] *Ibid.*, p. 383. [3] *Ibid.*, p. 389. [4] *Ibid.*, p. 387.

III.—ON CERTAIN OBJECTIONS TO PSYCHOLOGY.[1]

By T. Loveday.

There is a remarkable difference between the attitude of philosophy towards the physical sciences and the attitude which, in England at any rate, it is still apt to adopt towards psychology. The physical sciences, so long as they do not attempt rashly to universalise their procedure or their results, are free to pursue their own business without interruption, but psychology is not so fortunate. Her claim to freedom is too recent, and her relations to the normative disciplines and to metaphysics are in fact too close for any expectation of peace. To some it may seem actually better so; such near relationship to philosophy must, it may be thought, cause danger of improper exaltation; if psychology's first business is to get on with her work, she must also bear in mind her own limitations, a task which involves clear apprehension, though not criticism, of her presuppositions; and it conduces to clear apprehension to be baited by metaphysicians. But as a matter of fact it does not appear that psychologists are particularly prone to exalt their special study into a metaphysic; in claiming vehemently to be free of philosophy they recognise explicitly that, as psychologists, they are not dealing with first principles. Moreover, it is curious to note that they are not accused so much of being as of failing to be metaphysicians; an incautious biologist will be charged with trying to be a philosopher when he ought not, but the psychologist with trying not to be a philosopher when he ought. The purpose of the following pages is to examine some objections of this kind more or less commonly advanced against psychology, and in part they have special reference to Mr. Prichard's interesting article in Mind, N.S., 61, where several of these objections are fully and adequately stated; but I

[1] This paper was already written before I had the benefit of reading Mr. Joachim's article on "Psychical Process" in Mind, N.S., 69, concerning which I have appended a few inadequately brief remarks at the end.

have also considered one or two criticisms which would not, if I understand him aright, commend themselves to Mr. Prichard.

Before one proceeds, however, to consider objections in detail, it is desirable to comment on certain difficulties due to the form in which they are taken. It might conceivably be argued (1) that psychology cannot, and therefore does not, exist at all, except as a tissue of deceptive and useless fictions; (2) that it cannot and does not exist as an empirical study or natural science, but only as a branch of philosophy; (3) that parts of it may constitute a science, but other parts are impossible or possible only as a branch of philosophy. I am not aware that any one actually holds the first position, but, as I shall try to show, it represents the conclusion which should follow from some of the objections actually taken if they were valid. The second position is Mr. Prichard's, if I follow him rightly, for though the limited purpose of his article prevents him from dealing with the empirical study of feeling and conation, his concluding sentences seem to show that he regards all psychology as properly a part of philosophy. Still it is worth noting that his case is not isolated; objectors almost always concentrate their attacks on the treatment of cognition and leave their attitude towards other parts of psychology, and especially towards the psychology of feeling, unbecomingly obscure. Mr. Prichard, it has further to be observed, has added to the preliminary difficulties by a peculiarity of method. A great part of his article is concerned with arguments to prove, not that a scientific psychology is impossible, but that conceptions employed by certain writers in their exposition of the subject are ill-judged and misleading. He raises a very difficult problem on which I shall make some hesitating remarks in the second part of this paper, but he confuses it almost inextricably with his primary problem. It is one thing to argue that scientific psychology is impossible and quite another to argue that M.'s or N.'s method is impossible. The confusion is due to the fact that Mr. Prichard, taking one work of Dr. Ward's and two of Dr. Stout's, has made them "represent the attitude of current psychology". Whether he has rightly interpreted the passages that he quotes is neither here nor there; he has forgotten that in psychology, as in some other sciences, the greatest disputes rage round fundamental notions and not round results; and so, assuming a fictitious "current attitude," he has confounded general objections to empirical psychology as such with objections to particular views held—if they are held—by certain eminent

psychologists.[1] It was necessary to remove this cause of obscurity before proceeding to consider objections in detail.

I. It has been argued that since the world as a systematic order is the work of knowing mind, psychology has no right to assume such a world in its attempt to trace the development of knowing. This argument, thus baldly put, is nowadays less often read than heard, and it is, of course, not put forward by Mr. Prichard. If it is accepted, the conclusion must be that all psychological statements about knowing are based on a fallacy, empty, and in the end meaningless; psychology is blotted out. For take one or two examples, putting them in any form you like, whether strict or loose: "The sense of smell is less acute in men than in dogs," "Recognition is facilitated by repeated perception," "If one looks at a white surface after looking at a strong red light, one sees the surface tinted green," "The child only gradually comes to distinguish even its bodily self from things external to its body"; all these statements involve a reference to the temporal order at least, and therefore on this view they ought to be, not perhaps partly or wholly incorrect, but simply without worth. They belong to a kind of statements that no one in his senses would make if he realised their lack of reasonable basis. But this conclusion seems to be not altogether free of absurdity, and the error in the argument is near at hand. The objection would be good only if psychology pretended to be metaphysics. If psychology forgets its own limitations—if, for instance, it attempts to explain knowledge in general—then the retort is possible that the conditions by which it explains broaden themselves out almost at a glance into a world which is what it is by reason of knowledge. But as it happens the psychologist is less often a headlong-plunging metaphysician than the biologist or the physicist or the journalist. He is generally quite well aware that he is looking at things from a "common-sense" point of view which is not final. His position is that of a spectator of what one may call Mental Behaviour. It is among the facts of the world as a systematic order that men and

[1] For my part I am in several places quite unable to follow Mr. Prichard's interpretation of his authors, and it is perhaps unlucky that he did not consult other writings of theirs. Anyhow, one cannot but agree with Mr. Herbst's comments on the severe limitations which Mr. Prichard has imposed on himself (*Zeitschrift f. Psych.*, 46, 276). If anyone thinks, for example, of Münsterberg's *Grundzüge*, then of Pfänder's *Einleitung*, then of any of Titchener's books, and then of those of Miss Calkins—I mention these authorities as being in every one's hands—he will hesitate before speaking of a "current" doctrine of psychological fundamentals.

beasts do mentally behave in various ways. As a "common-sense" person in the world of "common-sense" I am quite within my rights in observing Smith and his dog and noticing that the dog has the keener sense of smell (or at any rate makes more use of it), or that Smith recognises me more rapidly than he recognises Jones whom he has rarely seen. I am not less within my rights in observing my own mental behaviour, or in attempting to generalise about the mental behaviour of all men or even (perhaps) of all finite animates. I am not concerned with knowledge in general but with the mental behaviour of individuals—in the end of a typical individual or of typical individuals. This procedure does not give one an ultimate view of the universe; it involves presuppositions which are taken for granted, as does any special science; but, though the metaphysician may think the occupation dull and narrow, it is a legitimate and not a senseless way of passing the time.

II. It is argued that knowing, being "the relation in which a knower stands to" an object, cannot itself be an object, and therefore cannot be treated by psychology. The same odd conclusion ought to follow here as from the first objection; but Mr. Prichard, holding that it is possible to be aware of our knowing by reflexion, qualifies his conclusion to the effect that knowing cannot be an object "in the same sense in which anything else can be an object," and so (by some rather obscure connexion) is prepared to admit that it can be treated by a faculty psychology, but not in any other way. As I said before, it is not quite clear to what limbo he would relegate feeling and conation and also sense (to which he seems to attribute an unexpected independence); nor is it clear whether on his view reflexion is confined to being "aware of" knowing or can also qualify knowing by predicates. This latter point seems to be of some importance, for if we can judge about knowing, then (unless our judgments are by some unexplained necessity confined to predicating values) knowing can be an object in the sense in which psychology requires it to be an object. If I can reflect and judge about my knowings and their conditions, and Smith can judge about his, surely we may compare notes; and then we are beginning to psychologise. We do not require that our knowings should be objects in the sense in which our tongues or our words or the British constitution or the dishonesty of politicians are objects, but only that they should be convertible into objects of intelligent consideration; their essential subjectivity is itself one of the characteristics that we thus assign to them. We need not ask how many mean-

ings the words "reflexion on our knowing" may have, but certainly in one mode of reflexion we can and do regard ourselves and others as performing acts of knowing in time. These acts of knowing essentially involve the unique relation of subject to object; they are each the private act of an individual; they are inaccessible except by inference to any but the individual that executes them. In all these ways they are subjective, but they also take place in time. In ordinary life it is legitimate to ask, At what time did you see me pass? and to answer at 2.30, and to add, I took longer to recognise you than Smith did. We are all of us constantly treating knowings as events, and it is thus that the psychologist treats them. He is not concerned with the internal implications of knowledge in general, but with acts of knowing and their position in the series of acts and feelings that constitutes the history of the mental behaviour of individuals. He takes, as was said above, the "common-sense" spectator's attitude. Acts of knowing for him stand in temporal and conditional relations to one another, and to other psychical events, and to events that are not in the same sense psychical.[1] He takes the temporal order for granted, no doubt; so do we all in the common-sense world with which alone he is concerned.

III. It is objected that the instrument by which the psychologist investigates knowing is itself knowing. In principle this objection is the same as its predecessors, and the reply is the same. Psychology is not an attempt to explain or to evaluate knowledge, but is only concerned with knowings as acts of individuals in time. That the very act of reflecting on one's other acts of knowing is not at the moment of its occurrence in any sense the object of one's reflexion is of course true, and not at all to the point.

IV. We have already anticipated to some extent the answer to the contention that psychology, if it be at all possible, cannot be an empirical or natural science, and have indeed contended that just because it has this character it escapes the foregoing objections. At the same time I should not agree with those psychologists who, fearing the bondage of their study to particular metaphysical theories, speak as if it became non-metaphysical by merely starting from the common-sense view of things, for the common-sense view of things is extremely metaphysical, though it may not be very good metaphysics. The point is rather that psychology becomes non-metaphysical by recognising that the common-sense

[1] "Not in the same sense," because it may well be that whatever is real is in some sense psychical; but that is a metaphysical problem alien to the purpose of this paper.

assumptions from which it starts constitute a limited and partial position and are open to criticism by a more ultimate discipline. It is empirical because it deals with observed events, and non-metaphysical because it recognises that starting thus it cannot claim the last word about knowledge and the rest.

But Mr. Prichard argues that psychology cannot be a science (1) because it cannot have a subject-matter similar to that of any other science, and (2) because science involves explanation, and psychological explanation is impossible. With regard to the former of these points, as I have said already, he confuses the issue by confining himself to an attack on particular statements of two authors. It is not my purpose to attempt their defence, for it is really conducive to clearness to keep the issue as broad and free of detail as possible. The broad answer, it seems to me, is once more just this that mental behaviour does take place in time and can be observed,[1] and its development can be traced. We all of us constantly observe and argue about our own mental behaviour and that of others in ordinary life, and about the conditions under which it has this or that character; and it is difficult to see why the attempt to systematise our observations and arguments should be condemned as from the beginning unreasonable. However partial the truth it may reach—that is not for it to decide—psychology has in mental behaviour a peculiar subject-matter, no less than any other science.

Moreover, to pass on to the second point, this subject-matter admits of scientific treatment. Of course, if you limit your conception of science in an arbitrary way, you can deny this, but your denial is valuable only if you can justify the limitation you impose. Mr. Prichard appears to hold that if psychology is to be rightly called a science, it must aim at explanation of mental behaviour in the particular sense that it must derive the later stages of mental life from the earlier, and he objects that "the various terms of mental process" (by which I take him to mean what I should call modes of mental behaviour) are "ultimate" and "*sui generis*" and "incapable of being derived from or stated in terms of anything else". The argument is: "Empirical science = explanation = derivation of a later from an earlier stage of a process = showing that the later stage is not unique but only

[1] I do not mean to exclude inference from observation. All concrete observation includes some element of inference, at any rate in adult human beings, and of course observation of the mental behaviour of others is essentially inferential.

a complex or combination of more rudimentary processes. But every mental process is unique, and therefore not to be derived, and therefore not to be explained, and therefore incapable of scientific treatment." We need not be led away into a discussion of the exact meaning of explanation, or of the truth of the successive identifications which Mr. Prichard somewhat dogmatically asserts. The important question is what psychology does, not whether we should call what it does explanation.[1] It has been held that co-ordinated and systematic descriptive generalisations have a place in science, which does not seem to be always explanatory, and certainly not always explanatory in Mr. Prichard's sense; but the genuine problems that his argument raises are, whether every mental process is "*sui generis*" and "ultimate," and whether, if this is so, the very fact precludes both analytic and genetic treatment of mental behaviour. As to the former of these questions there is, I think, a lack of explicitness in the work of many excellent psychologists. The associationists' attempt to describe some processes (or, as they preferred to say, states) as simply congeries of other more elementary processes or states is now pretty generally discredited, and it is recognised that mental growth is not a coming together of mental atoms; but one is often left in doubt what conception is substituted, or whether any has been substituted at all. In what follows, therefore, though I could cite good authorities in my support, I shall not venture with Mr. Prichard to speak of a "current view". It seems to me not only that every kind of mental process, but that every moment in the history of every mind, is unique and ultimate; indeed one might, perhaps, go further than this and say that in a sense every mental process and every mental moment is simple. For as a direct experience it is a unity which cannot be reconstituted after analysis, although the least reflexion on it involves some amount of analysis of it. No doubt, reflexion is thus analytic of it partly in virtue of complexities which it presents to reflexion; but it is as characteristic of direct experience to be a unity before reflexion as to afford a grip to analysis when reflexion comes. Neither the uniqueness nor the simplicity of direct experience forbids analytic and genetic treatment of it. Analysis, which is necessarily the first step in psychology, depends upon this fact that what as direct experience is simple may yet to reflexion appear more

[1] I do not, of course, mean to deny that questions whether psychology can really "explain" or whether that power is reserved for a future cerebral physiology, and the like, are important in their place; but they are apart from my present purpose.

or less complex. I am annoyed by hearing a man crying milk in the street and am inclined to go out and address him profanely. Here is an experience simple in itself but extremely complex as soon as I begin to reflect on it and put it into words. One need not be a psychologist to perform so much analysis of it as is involved in thus stating it; every one performs psychological analysis to this extent, and the basis of the analysis is obviously resemblance. I can hear other noises than that of "milk-oo!" be annoyed in other ways, and so on; analysis rests on comparison of similar features in different experiences. And the case is not altered when we pass to the more precise and systematic analysis of psychology. The differences between psychological and physical analysis have been emphasised a thousand times and it is not necessary that the more "elementary" processes reached by analysis should be able to occur separately: still less is it necessary that they should be more primitive in order of development. If they do occur separately, then as thus occurring they are not the same as in the complex, though there is a resemblance; or in other words, when you have analysed a complex mental process, you have not got a number of separate parts which you can reconstruct into the whole. Thus perception of things is commonly held to involve sensation,—or for sake of peace let us say that perceiving is held to involve sensing, though not sensing alone,—and sensing, since it cannot be again analysed in a similar way (if that view is taken), is said to be an elementary process; but it is not implied that sensing is possible apart from perceiving, nor that it is prior to perceiving, and if those views are held, they have to be supported on other grounds than analysis. Still less is it implied that perception is a congeries of sensations or of these and other processes. Or take a case from the emotions. Every one speaks of some emotions as more complex than others; yet as immediate experiences they are all simple. "Reproach," says Dr. McDougall, "seems to be a fusion of anger and tender emotion,"[1] and, whether one agrees with his analysis or not, reproach seems to reflexion to be complex. Yet as directly experienced it is "*sui generis*" and, I should say, simple. In any case it is not merely anger *plus* tender emotion—this is expressed in the word 'fusion,'—but it is a condition distinct from both and yet resembling both. Anger as it occurs in reproach is not the same as anger unfused with tender emotion, and tender emotion fused with anger is not the

[1] *Introduction to Social Psychology*, p. 139.

same as tender emotion by itself, and reproach is not the two added together; and yet if we accept this particular analysis, we can recognise that reproach does involve both anger and tender emotion, and if we reject this analysis, it is because we think another preferable, or at any rate because we think this in some way inadequate, and not because we think analysis impossible. In this case it happens that anger and tender emotion can exist otherwise than in reproach, and it also happens that, according to Dr. McDougall, they are more primitive than reproach; but these points are accidental to, and not consequences of, the analysis. That we can thus reflectively recognise complexity in acts and feelings which as immediately experienced are simple, is a fact about them which has to be accepted, and there follow, of course, the two consequences that when we have broken up the immediate experience we have thereby passed from immediate experience to the use of conceptual 'counters' or 'symbols,' and that an enumeration of these 'counters' is not a reconstitution of the immediate experience but a substitute for it. An enumeration of all the processes involved in recognition and of their relations does not give us the original act of recognising; we have actually to recognise in order to get that: but it would give us a construction which for descriptive purposes we could substitute for the original act. Such a construction would, as against all less complete attempts, be and be recognised as adequate; it alone would be the correct description. Now the attempt to obtain such correct descriptions of the different kinds of mental behaviour seems to be both empirical and scientific.

It was convenient for simplicity's sake to speak as if in psychological method analysis always came first, for it seems to me that analysis is the most difficult part of psychology to justify, and that if it is justified, there is little room for further dispute. As a matter of fact too, analysis does come first, though it is afterwards reacted upon by the results of other lines of inquiry. Next it seems natural to consider the attempt to ascertain the conditions of the various mental functions. We may ask not only what processes are analytically involved in perceiving or recognising or in the emotion of reproach, but also under what conditions we perceive or recognise or feel reproachful. And again we may distinguish various kinds of perceiving and various degrees of recognition, and inquire about the conditions of each. These conditions need not all be in the ordinary sense mental, and whether mental or not they do not "explain" the function examined in the sense that it can be deduced from them.

When we push matters far enough, we come in the end to the fact that the soul (or mind, or consciousness, or whatever you like to call it) does behave in this or that way. But all the same the attempt to ascertain the laws of the conditions of different modes of mental behaviour, and to work from less to more general principles, appears to be a procedure rightly called scientific. Whether it should be called explanation or not is a question for logic that need not trouble psychology.

There remains the genetic problem, the attempt to trace the development of mental function in the individual, in the human species, and finally in all observed animate life. This is the aim which Mr. Prichard singles out as above all others "impossible". He ought strictly to have called it "meaningless," for what is in his mind is not that the conditions do not happen to allow of an answer, as most psychologists would agree is the case with regard to a great part of animal and child and savage life and perhaps with regard to some parts of adult human life, but that the problem itself is wrongly stated and is in effect not a problem at all. But plainly enough the problem is no problem only when it is mis-stated. Put the question very simply and ask: Is any development of mental behaviour observable as from beasts to man, from savage to civilised people, and in a single individual from child to adult? If so, and that it is so will not be denied, the attempt may surely be made to trace this development, both with regard to mental behaviour as a whole and with regard to selected features of it, and to discover where and under what conditions alteration, whether advance or degeneration, has taken place. But Mr. Prichard imagines that the problem is to show that the later processes are only the earlier in a more complex form, meaning by this that the later are to be reduced to the earlier. "In particular in the case of knowledge," he writes, "psychology seeks to show how it is that a life which begins with sensation and feeling comes to acquire the articulated knowledge of the world which we now possess." If we leave aside the assumption about sensation and feeling which is illicitly introduced, this sentence does express very fairly one side of the problem of genetic psychology, so long as the word "how" is taken to mean "under what conditions". Why then does it appear to Mr. Prichard to state a damnable heresy? His approving reference to faculty psychology, which he looks upon as particularly "philosophical," seems to provide the answer. He cannot, one imagines, mean to deny that in the temporal order a development does take place, but he wishes to insist

that the most important condition of the character of this development is the nature of the soul itself. If this is so, he has no doubt signalised the strong point in faculty psychology. As Pfänder well says, we may avoid the word faculty as meticulously as we can; "Jede individuelle psychische Wirklichkeit enthält ja doch tatsächlich die dauernden realen Bedingungen für bestimmte Arten psychischen Geschehens; oder, anders ausgedrückt, sie ist dauernd so beschaffen, dass unter bestimmten hinzutretenden Umständen immer bestimmte Arten psychischen Geschehens in ihr stattfinden".[1] Mr. Prichard's error is to suppose that this is generally denied. He is misled, perhaps, by the polemics against faculty psychology, which are really directed at the appeal to faculties as a veil for laziness, and by the fact that, since we can but say once for all that it is the nature of the soul to behave in certain ways, writers on psychology devote most of their space to the "hinzutretende Umstände". And after all, these remaining conditions are just as necessary as the nature of the soul. Take the perception of space, for instance, as Mr. Prichard does. It is no doubt ultimate, *sui generis*, an expression of the nature of the soul, not to be resolved into anything else. But it is also the outcome of a process of development which involves other conditions besides the soul's nature in general, and it is not a meaningless or impossible aim to trace the development and to determine these other conditions. And so throughout, the attempt is not to resolve the later into the earlier, but to ascertain the conditions necessary to actualisation of the later. Once more, it is a matter of indifference whether the procedure is called explanatory or not; but it does not seem to be unscientific.

The conclusion of the whole matter seems, therefore, to be that the philosophical objections to psychology are based upon a mistaken notion of what psychology attempts to do. The foregoing paragraphs, so far as they deal with Mr. Prichard's paper, have, I trust, done no injustice to his arguments. It is possible that, had one the advantage of an exposition by him of his metaphysical position, some points would have appeared in another light; but so long as that unfortunately is not the case, one can but deal with his arguments as they stand.[2] And indeed, although the state of

[1] *Einleitung in die Psychologie*, pp. 176-177.

[2] Mr. Prichard's work on *Kant's Theory of Knowledge* has come into my hands almost simultaneously with the proofs of this article. Had it appeared earlier, I should have expressed myself somewhat differently in one or two places; but I have left the text unaltered because neither knowledge of, nor agreement with, Mr. Prichard's metaphysical views

psychological fundamentals at the present time is seriously unsatisfactory, one may doubt whether it will rest with metaphysics to effect an improvement; for as there is no study so alluring as psychology, except metaphysics, so there is no line of thought so misleading as psychological metaphysics, except a metaphysical psychology.

II.

At the beginning of this article I pointed out that Mr. Prichard in effect devotes the greater part of his space, not to a general attack upon psychology, but to objections against a terminology which he finds in the works of Dr. Ward and Dr. Stout; and though he seems in several ways to misinterpret those authors, it cannot be denied that something more or less like the hypotheses and conceptions which he discusses may be found in the writings of most psychologists, though not without very important variations. It is admitted on all hands that the doctrine of representative perception and of what one may call representative cognition in general is false, and yet in psychology we are constantly using terms which seem to imply that between the mind and its object there intervenes some third thing which represents the object and which is indeed itself the immediate object of the mind. In what follows I do not propose to go into the details of Mr. Prichard's arguments, but merely to put forward some considerations suggested by his remarks.

Such limited justification as is possessed by the representative hypothesis is derived, I suppose, from the region of imagination in both its reproductive and its constructive forms. The radical error of the hypothesis lies in connecting with cognition the notion of "states of consciousness". A feeling may fairly be called a state of the self or subject or of consciousness, but cognition—I reserve the difficult case of sensation till the end of this article—involves a subject's act and a subject's object, and even if, as in imagination, the object is in a special way a mental product private to the particular imaginer, it is not properly described as a state of consciousness, and still less so the act of cognising it. The peculiar position of imagination is best seen in its purely reproductive form, as *e.g.*, in visualisation of a thing once perceived but not perceived at the moment. If in this sense I image to myself Table Mountain, the image is the object

would seem to invalidate the contention that the position and problems of psychology are genuine and that the objections to them depend for plausibility on misunderstanding their actual character.

of my act. No doubt I do more than image it, since imagination is normally accompanied by conception and judgment. Even when an image comes uncalled for into my mind and I cannot remember of what it is the image, I do nevertheless refer it vaguely to 'something,' and evidently my visual image of Table Mountain will be accompanied by a reference to Table Mountain itself. Still there does seem at first sight to be intervention of a third thing here in a way in which there is not in perception and conception. No doubt this is due to defective analysis. In perceiving my table, in conceiving any universal, I am dealing directly with the objective world; the object of my cognising act is some part or aspect of the real order of things, and as a plain man I take it to be so. Even in memory the same is true; my object belongs to the real order of things, even though not to that part of it which exists at this moment. But my object in visualising is my own image, which has to be referred to that of which it is the image; what I *quâ* visualising cognise is the image. So far what one may term the hypothesis of ideas is justified, but there is no intervention of a third thing. Nothing intervenes between me and the "real thing," because it is not *quâ* visualising that I cognise the real thing, but by an act of conceiving or judging I refer the image to the real thing as an image of it. An image, then, may be called subjective in one sense of the word, as being an object essentially private to a single subject; but it is a subjective object, and therefore not subjective in the same sense either as an act or as a state (*i.e.* a feeling) of the subject. Again, in the case of constructive imagination, the same limited justification of the hypothesis of ideas holds good, but there imagining and conceiving are as a rule so closely interwoven that the process is less easy to dissect.

Before passing on to consider the uses of the ordinary terminology, it may be worth while to consider very briefly certain other cases besides imagination in which the representative theory might seem to find some support, though by this time the ground has been trodden almost bare. Confusion arises in these cases, if it does still arise, either from unwillingness to accept a genuine distinction, or from undue readiness to accept an ambiguous one, or from both causes combined. The genuine distinction is that which Mr. Hoernlé noted in MIND, N.S., 61, page 87, between real and unreal objects. (I hasten to add, with Mr. Hoernlé, that I am not talking metaphysics.) My table, when I perceive it, is in this sense a real object of mine, and so is virtue when I think about it, whilst a fictitious object is unreal. But not

all objects fall into this division, for an image, as the object of an act of imagining, is neither real nor unreal, though as an object of psychological reflexion it is of course real. The obscure distinction, on the other hand, is between real and merely mental objects. My table, no doubt, as perceived will again be real, an image will certainly be mental, and there is an ineradicable tendency to class all conceived objects as mental, whether fictitious or not. But it seems difficult to find any ground for this division. In one sense all objects of mind as being objects of mind may be called mental. But how are some more mental than others? Some objects, it may be said, are private, others not. Certainly an image is private in a way in which a perceived object is not, but virtue is not a private object, and a fiction need not be. The notion at the bottom of this distinction can only be that presence to perception makes an object real and not merely mental, and what is not real in this sense tends to be considered as only a "state of consciousness". But this division is mistaken in principle, and if we can distinguish real from merely mental objects, it must be according as they are common or essentially private. This being so, there is no special difficulty in dealing with any instances that might seem to support the hypothesis of ideas. Take first the cognitive aspect of wishing what we do not expect to be realised, and thinking of what is fictitious, in both cases leaving out of sight any part that may be played by imagination in its narrow sense. We are here dealing with unreal objects, though to a greater or less extent we determine them by conceptions of the real world. But these unreal objects do not help the representative theory; for, whilst we may say that they are ideal, we cannot say that we know them by means of ideas. Or again, take illusion. In illusion I perceive a real object, only I perceive it "wrongly"; that is, the object of my present perceiving act fails in certain respects to correspond to the object that I normally perceive under the same external conditions, or to the object as others tell me they perceive it under the same external conditions, or to the object as I apprehend it in other kinds of perceptual experience in which I have reason to put greater trust. (It is necessary to say "in other kinds of *perceptual* experience," because the contrast of illusion and correct perception does not go as far as that of apparent and real even in respect of the world of possible perception. Thus you may account only primary qualities real; but it would be forced to call perception of secondary qualities illusion.) What illusion

brings out is not that there is a third thing between the subject and his object, but that the character of his object, as an object of actual perception, is partly determined not only by the character of the objective thing and by the general nature of the soul, but by mental bias, accidents of physiological structure, and other psychological conditions. The same holds good of all error. I need only quote a couple of sentences from Dr. Stout's incomparable article in *Personal Idealism*. "All error," he says, "consists in taking for real what is mere appearance. . . . But there is always mere appearance when and so far as the nature of a presented object is determined merely by the psychological conditions of its presentation. . . . It should be clearly understood that mere appearance is a qualification of the object apprehended and not of the mind which apprehends it" (pp. 15-17).

The representative theory, then, is doubtless to be rejected. At the same time it may fairly be maintained that Mr. Prichard greatly over-estimates the deleterious effect of its language upon psychology. One must admit that it has in the past led to serious misconceptions, such as the attempts to construct a mechanics of ideas, and to some troublesome absurdities, as, for instance, the notion that ideas when not consciously cognised retreat into a Hades of the unconscious, where they continue to exist and occasionally to gibber. But Mr. Prichard's contention that the psychology of cognition is vitiated by the "non-existence of the counters or units in terms of which it speaks" has force only if the psychologist is thus misled. A conception which is admittedly open to criticism may yet be convenient as a means of advance in many kinds of inquiry, and I should have thought that nowadays the majority of psychologists are quite well aware of the nature of their procedure when they speak in terms of the representative theory. It is obvious, for example, that "association of ideas" is really association of modes of mental behaviour or tendencies thereto; if on seeing Smith's dog I think of Smith himself, the association is between my acts of perceiving and thinking thus, and the "laws of association" are general statements of tendencies to behave in certain ways. But the terminology by way of ideas has been pretty well systematised, and it is at least open to question whether to revolutionise terminology would not do more harm than good. Moreover there are other advantages besides a systematic language in the customary way of speaking. In the first place, the psychologist is enabled to mark with sufficient plainness, if not with strict accuracy, the distinction between the object as it is in the objective order

and the object as it is an object of an actual cognition. By this form of words, to which I do not wish to commit myself, I am merely trying to indicate a distinction made by every one, but difficult to enunciate precisely because of the ambiguities of the word object. Every one believes that in perceiving this table he is dealing directly with the real objective world, but he also believes that, whilst his present object is this table in certain relations, the table really stands in many other relations which may or may not be "latently" known to him, but which are not actually cognised by him at this moment. Similarly with non-physical objects—virtue, or the character of Smith, or the comparative usefulness of a March Brown and a Red Spinner, or the toothache which you are now enjoying; they do not exhaust their nature in being objects of any actual cognition of mine or yours.[1] Moreover, the nature of the object of an actual cognition may be determined to a greater or less extent, as the case of illusion showed, not by the character of the objective, but by subjective psychological conditions. Psychology therefore has to accept and insist on this distinction. It has not got to criticise or even to formalise it, or to develop its implications; it does not ask whether we should distinguish from the object of a particular act of cognition the reality as it is in itself, or the reality as the sum of possibilities of cognition, or the reality as common object, or whether all these phrases are unsatisfactory. But it has continually to signalise the distinction, and it does so conveniently enough by means of such terms as percept, presentation and idea.

In another way also the fiction is convenient. If it is granted that in cognising the mind has for its object in a narrower sense something objective in a wider sense, there is near at hand a danger of speaking as if the objective became such and such an actual object by its own virtue. It is in the abstract possible to conceive that all acts of cognition are homogeneous, and that differences lie wholly in the things that become actual objects, or in these and in the feelings accompanying the acts of apprehending. The psychology of cognition would then not correspond to the conception of psychology as the study of modes of mental behaviour, for on this side nothing could be said except that we do apprehend, and the only problem would be how things manage to be apprehended in this or that aspect. Even ordinary language so far avoids this error as to distinguish perceiving from conceiving, both from imagining, and so on;

[1] Plainly this is equally true of what we have called unreal objects.

but once we are past these striking differences, further distinctions are for the most part named from the objects, and it is here that the danger comes in of forgetting that a difference of object means a difference of act. Within perception, for instance, there are such differences as are indicated when we speak of perception of sensory qualities, perception of space, perception of time, and so on, and these differences are named from the objects.[1] Now the main psychological problems about cognition are, as we have seen, (1) What processes can analysis detect as involved in perceiving, conceiving, etc.; and within perception in perceiving this or that kind of object or these or those aspects of objects; and within conception and the rest similarly? (2) Under what conditions do these kinds of cognising acts occur and how are they connected; and within each kind what are the conditions of its different forms? (3) What is the history of the development of these kinds of acts and their different forms? And in a sort of a way, one cannot but feel, the language of ideas does mark the fact that such are the psychological problems, for by placing ideas as the immediate object of the mind and insisting that these ideas are mental and largely determined by particular assignable mental conditions, it makes the problem mental. No doubt it does so in a wrong-headed way, but it serves as a safeguard against a worse error. The worst position is to suppose that we have for our problem nothing but differences in the modes of behaviour of objects, or in other words different appearances. The right position, it seems to me, is that we have our psychological problem in differences in the modes of mental behaviour: only thus, for example, can we appreciate the influence of "subjective selection". The hypothesis of ideas leads to the right position because it regards objects as mental states, and so it is not useless, though inaccurate.

I pass on now to certain problems connected with sensation, which of all difficult notions in psychology is certainly the most obscure, the cause of its obscurity being that the term is used to group together a number of kinds of "experiences"—I use this as a convenient general term,—not because of their likeness to each other as "experiences," but because of the likeness of their conditions. In Baldwin's *Dictionary* sensation is defined as "that mode of consciousness which

[1] I take perception merely as a striking instance. Some hold that the term is no longer very satisfactory or useful; and if that view is taken, because the differences between the kinds of perception are so marked that a single term including them all is misleading, this only emphasises the point of the present argument.

can only be accounted for by the present operation of an external stimulus upon the nervous system, or some equivalent condition," and, as its authors note, "this definition is not strictly psychological". Now let it be a good definition or not, it is so far right that it makes the test of sensation relationship to certain physiological conditions, and no doubt this test provides a useful and important means of grouping certain data; but we have no right to assume that there is an internal resemblance between all things that answer to this external test.

So long as we keep to sensory qualities actually perceived, we are not confronted by any special difficulties. I see a mass of scarlet lychnis. Scarlet is evidently a quality of the flower-heads as actually perceived by me; it is one aspect of the object of my perceiving act. Reflecting on the conditions under which one sees objects scarlet, the psychologist with the physiologist points out that certain definite physiological processes are constantly and necessarily required if scarlet is to be seen, and so he calls scarlet a *sensory* quality, and the apprehending of it sense or perhaps 'sensing' or sensation. The sensory quality is thus an abstraction from the object of the perceiving act, and sense, sensing or sensation an abstraction from the act itself. So far the road seems plain enough; yet there are possible false turnings, and down one of them the psychologist is rather likely to turn his steps. I may notice for instance that though the mass of lychnis looks scarlet in a good light, it no longer looks scarlet when the light is very dim, and I may then be misled to inquire, Is the lychnis really scarlet? And I may answer, Impossible, since it does not always appear scarlet. And from this I may argue that since scarlet is not really a quality of the lychnis, and yet enters into my experience, it must be a state of my consciousness. And then I may talk of 'having' a sensation of scarlet, as if I could have the sensation in some other sense besides seeing scarlet. The fact plainly is that scarlet is a quality of my actually perceived object; it is not a quality of my act, of my mind, of me at all. I am no more scarlet from seeing the lychnis than round from seeing a cricket-ball. Sensations such as this scarlet must mean either aspects of my perceiving acts or aspects of the objects of these acts, *i.e.*, they must be either sensings or sensory qualities; when they are given any third meaning it is a sign that the psychologist has deviated outside psychology. Lychnis seen in a bright light is really seen as scarlet and in a dim light is really seen with a duller hue, and the psychologist has to inquire into the conditions under which a real objec-

tive thing is now perceived as a scarlet object and now as otherwise coloured. But it is not his business to ask whether lychnis as a real objective thing apart from being an object of perception is scarlet or another colour or no colour at all; he is concerned with it only as an object of perception and only from his interest in the act by which it is perceived as an object. With the distinction of primary and secondary qualities and suchlike problems he has no concern.

So far then sensations are either sensings and therefore subjective acts, or abstractions from such acts; or they are sensory qualities, and therefore objective in the narrow sense that they are aspects of perceived objects. Whether these sensory qualities can be attributed to objects apart from their being perceived, psychology says not and cares not. But sensations are not (so far) in any sense subjective states or states of consciousness. But now we come to a group of experiences also commonly called sensations which are neither abstractions from acts of perceiving nor qualities of perceived objects, but which have a right to be called states of the self or subject (or states of consciousness, if that term is preferred). I am not thinking of more or less discriminated organic sensations localised more or less definitely in some part of the body. If I cognise a bodily pain—a rheumatic twinge in my arm, say, or a sore throat—it is not a state of myself or of me as subject in the sense intended, but a state of my object —my arm or throat—though in another sense, in so far as I apprehend my arm or throat as mine, I apprehend their states as states of my self. It would, perhaps, be going too far to say that discriminated organic sensations are altogether on a par with the scarlet of the lychnis and with what we may call cognitive[1] sensations in general; but since it might be argued, for instance, that the difference is due to their setting, their relations to really subjective states, and the like, and it is not very germane to my present purpose to examine such contentions, I will class them with other cognitive sensations, to which they do belong in so far as they are the object of cognitive acts and these acts, if any one objects to calling them acts of perceiving, are at least on the same level as acts of perceiving. The case is not essentially altered when the organic sensations are not separately discriminated and not definitely localised, but are, separately or as a complex, apprehended vaguely as a state of some large region of the body or of the whole body,—as, for instance, with the shivering and general bodily malaise that mark the

[1] The word 'cognitional' would better express my meaning, if it were admissible.

onset of fever.[1] For they are still parts of an object of perception or some act akin to perception. But it is admitted by most writers that there are states of feeling which are not attributed to the body as its states, but are states of the self as subject, though they may be *made* into objects of reflexion; and it is commonly held that sensations enter into and at least help to constitute all concrete feelings. Here then we have sensations which not only are not separately discriminated but do not bear any direct relation to cognition. Now if the term sensation is used solely with reference to their physiological conditions, the presence of sensations in most or, I should agree, all concrete feelings cannot be denied. That is to say, if in mental malaise or vigour, mental depression, emotions and moods generally, you abolish the conditions of the "bodily resonance," as it used to be called,[2] you abolish or at any rate greatly alter the affective state itself. But it does not follow that we ought to group these affective sensations with cognitive sensations as "experiences". There is not the required similarity between the two groups, and it is no reply to say that *if* you turn your attention to this or that part of the body you will notice cognitive sensations there. No doubt, as soon as you try to attend to an affective state, you find more or less localised cognitive sensations; but in finding them you so far destroy the affective state. Granted that similar processes were occurring in certain afferent tracts and so on when you were not attending; you may justly say that such and such organic sensations were involved in the affective state, but they were not the cognitive sensations that you perceive now you attend.

We have now before us (1) cognitive sensations, *i.e.*, sensory qualities, and (2) affective sensations, or feelings so far as

[1] The localisation of organic sensations is certainly at times very vague indeed when they are evanescent, but in my own case at any rate this is largely dependent on defective visualisation. As to the alleged localisation of certain pleasures and unpleasures, there is little use in contradicting trained observers (see Titchener, *The Psychology of Feeling and Attention*, p. 45). I will only say that in my own case again I am unable, after much searching, to find instances in my own experience of such localisation. I can find experiences which might be rashly described in this way, but they always divide on further observation into localised sensations and an unlocalised residuum.

[2] It is indifferent to this argument whether the organic sensations are involved in the feeling from the first or gradually reinforce it. Titchener (*op. cit.*, p. 38) argues, if I understand him aright, that concrete feelings are not to be distinguished from sensations by their subjectivity because they comprise organic sensations. This seems to me an exact reversal of the truth. Feelings are subjective, and the sensations they comprise are grouped with objective sensations, not because they seem like them, but because they have the same physiological conditions.

dependent on certain determinate physiological conditions. These groups ought not, as far as introspection goes, to be classed together, but neither of them presents any difficulties in the way of criticism of the hypothesis of ideas; for sensations of the former class are objective, and those of the latter, though subjective, have no direct concern with cognition. But there remains a third kind of sensations which, as is frequently said, are not themselves the object of cognition, but are means to the cognitive determination of the object. Size, shape, distance, extent of movements and so on, it is said, are cognised by help of sensations many of which do not become part of the object of the cognition. Are they then objective or subjective? If subjective, are they not so as states of the subject, and yet are concerned with cognition? Whatever be the right view of them, and it is difficult to get a satisfactory view, two points seem fairly clear. In the first place, they do not stand between the object and the subject in the same way in which on the representative theory percepts and ideas were supposed to stand between the mind and its perceived or conceived objects, for they are not like the objects. And, secondly, they do not require us to modify our conclusion about the objectivity of cognitive sensations. For cognitive sensations are admittedly in the object as sensory qualities (even if it be maintained that they are states of consciousness as well), but these other sensations, which may perhaps be called notificant, are not in the object at all. Once again we have a common name applied, not from immediate resemblance, but on the strength of similar physiological conditions, and we have no right to argue through the common name to anything but these conditions and their consequences, etc. No doubt by an effort of attention we can discriminate many (though not all) of these notificant sensations, but we do not discriminate them in the object which they enable us to cognise. We do not by discriminating them cognise the object more accurately; on the contrary, we turn away from it and make them our object. Thus they do not necessitate a review of our previous conclusions. But it still remains to ask what their position is when attention is not turned to them. The facts about the part they play seem to be these. In order that we may now appreciate size, shape and the rest, (1) we must previously have had, at any rate in most cases, cognitive experience of these sensations—that is, they must have been cognitive sensations and objective, just as they are now when we attend to them, and this past experience must be effective; and (2) the physiological condi-

tions of these sensations must now be realised. But have we any right to say that (3) the sensations must now be present as psychical experiences? It might be argued either that they are present as dimly cognised, and therefore still objective, though this position can be supported, I think, only in a certain number of cases; or that they are present as feelings, when they could hardly be effective; or that the physiological conditions suffice and the sensations are not present at all, a view which seems to me in many cases to be true; or that they are unconscious, a doctrine which must certainly mean a great deal if it means anything at all. If we leave aside this last hypothesis as a mere mystification, the result is that these sensations like all others must be either subjective as feelings (though this is here improbable) or objective as perceived, or psychically non-existent. If they are objective, they are, though not the central object of attention, yet not altogether outside the range of cognitive apprehension at the moment, so that, whilst relatively to the central object of attention they are merely notificant, they are at the same time to be grouped with cognitive sensations. But in a great many cases, it seems to me, they are probably non-existent psychically, or (if they are present in some feeling as affective sensations) it is not as psychical but as physiological processes that they perform their notificant function. The same general argument applies also to those obscure or altogether unnoticed sensations which are supposed to guide movements.[1]

Note.—This paper is already so long that I can append only a few brief remarks on Mr. Joachim's valuable article, not hoping within such limits to do it adequate justice, but desiring to indicate roughly the relation of what has been said above to his criticisms of the notion of psychical process. The description of psychology as studying mental behaviour, which is a variant (adopted for reasons which need not be here discussed) from Dr. McDougall's definition of it as "the positive science of the conduct of living creatures,"

[1] It is, of course, possible to group together sensations by resemblance as experiences. In that case, as Dr. Boris Sidis has shown in two notable articles (*Psychological Review*, Jan. and March, 1908), we must class as sensations the elements in percepts which are generally said to be "reproduced" or "reinstated" by way of complication, and we must also class hallucinations with percepts as sensory objects and not images. There is much to be said in favour of taking this line, but if we do take it we must, it seems to me, throw affective and merely notificant sensations overboard and deny that they are sensations at all. We must keep to a single principle of classification: the attempt to combine two is bound to end in confusion.

is assailable by many obvious criticisms (though, as far as I can see at present, such criticisms would only impose limits, to be readily accepted, on the use of the conception, and would not impair its utility in the region for which it is intended); but it does not appear to be exposed to the particular objections so ingeniously developed by Mr. Joachim. And since most psychologists, whatever their language and however violent their disputes about fundamental notions, seem in the end to mean not altogether different things from one another, I doubt whether many have really held the view of psychical process which he condemns.[1] Their view is surely not as a rule so different as he assumes it to be from the view of such novelists as he mentions. It is not so much in the kind of their data as in the use that they want to make of their data that the psychologist and the novelist differ. For one thing, the novelist, wishing to give a relatively concrete sketch of a certain kind of character, has no need to simplify to the same extent as the psychologist, and the whole aim of analysis (with its concomitant synthesis) is simplification, as a step to the main problem of determining the conditions of occurrence or growth of mental behavings. But the psychologist no more than the novelist supposes that he can catch a cognising act without a cognised object, —an act of seeing, for instance, without a seen object. On the other hand, it is equally impossible for him to catch a seen object without the act of seeing, and Mr. Joachim's phraseology at times seems to neglect this reverse side of the matter. The psychological interest, of course, lies not in seeing by itself or in a seen object by itself, but in the conditions of seeing objects.

Secondly, I cannot think that the difficulty extends as far as Mr. Joachim supposes. Surely it is in the main confined to cognition. For (i.) it does not apply to affective states as such at all. An emotion, of course, is complex and involves more than affective states; but, keeping to its affective side, does any one try to distinguish "the pain of parting from the psychical process of experiencing the pain"? And (ii.) as to conation, though I have purposely avoided the subject in this paper and do not wish to be drawn into it here, yet this much seems plain, that conation involves certain typical sequences of cognitions and affective states and that its course itself is felt, so that it always has an affective side which is free from the danger in question.

[1] The school which is best represented by Lipps comes, perhaps, nearest to this position; and it gives point to Mr. Joachim's criticisms that this school, by separating off activity from its conscious results, is driven to regard the former as unconscious.

IV.—REFLECTIVE JUDGMENT — THE HIGH-WATER MARK IN THE CRITICAL PHILOSOPHY.

By R. A. C. Macmillan.

Although the *Critique of Judgment* has its place, historically, as an after-thought in Kant's system, the thoughts it contains were present to his mind from an early date. As far back as 1764, there is the short essay entitled *Beobachtungen über das Gefühl des Schönen und Erhabenen*, in which he gives token of an artistic turn of mind with which he is seldom credited. Here Kant suggests that even scientific pursuits have an æsthetical character, so that knowledge may become the subject-matter of Feeling and subordinate to it; thus he speaks of the charm of which a Kepler was capable, who would not have sold one of his discoveries for a kingdom.[1] In an article in the *Kantstudien*,[2] there is an elaborated argument to show that as Kant's Æsthetical Philosophy is open to the charge of intellectualism, his Intellectual Philosophy is no more free from the influence of æsthetical ideas, as when he follows his prejudice in favour of logical Symmetry at the expense of Truth. One might say that his elaborate trichotomy is the result of the free play of his Imagination with his Understanding. It may not be readily believed that Kant wrote Poetry, but he actually did write five stanzas at least, each of which is devoted to the memory of one of five Colleagues in Königsberg University.[3] And the fact that Herder turned one of his lectures into verse, surely counts for something in favour of Kant's poetic turn of mind.

Facts like these, though slight, are sufficient proof that this third faculty of the human mind was within the sweep of Kant's reflexions before the *Critique of Pure Reason* was definitely planned. The *Critique of Judgment*, then, does not answer a newly-born demand so much as the renewed consciousness on Kant's part of what he had felt already. It is true that in the letter to Herz of 1772, he has already lost

[1] *Briefwechsel*, p. 4 (Kirchmann). [2] Band 2, Anna Cutler.
[3] *Briefwechsel*, p. 299.

sight of the independence of Feeling, for he brings it in common with Morality under the heading, Practical.[1] But in this letter he is concerned with the central problem of the *Critique of Pure Reason*, how an idea can refer to an object; and, speaking roughly, one may say that from this time on till 1787, there are only two divisions of Mind for Kant, the Theoretical and the Practical. In his anxiety to subordinate Sensuous Feeling to Moral Law, moreover, he does not wait to distinguish the finer and higher emotions from those which are lower. But after the *Critique of Pure Reason* was lifted off his mind, we find the distinction again forcing itself upon him in the *Metaphysic of Ethics*, when he distinguishes "practical pleasure" from "passive satisfaction"; this latter is "not a pleasure in the existence of the object of the idea, but clings to the idea only," and this feeling of Pleasure "we call Taste".[2] Moreover he goes on to say that such a thing as Taste can only be treated "episodically" in a Practical Philosophy, "not as a notion properly belonging to that philosophy," thus removing Æsthetic Feeling out of the region of the Practical aspect of Mind. It was finally in 1787, in his letter to Reinhold, that Kant made up his mind about the independence of Feeling. There he recognises three parts of Philosophy, Knowledge, Feeling of Pleasure and Pain, Desire: and seeks to find *a priori* principles for the second as for the other two, though he formerly held this to be impossible; he hopes to be ready with this by Easter under the title, Critique of Taste. Here we have the *Critique of Judgment* coming to the birth; it was published three years later in 1790.

But though he now recognises three parts of Philosophy, this does not mean three sets of *doctrine:* there are three Critiques, but only two of them are doctrines. He insists on this in the Introduction to the *Critique of Judgment*.[3] But while he was formerly inclined to give a subordinate place to Feeling, he now excludes it from the dignity of a doctrine in order to raise it to a higher plane. By the time Kant had settled the problems of Science and Morality, he began to tire of Definitive Judgment, Determination, and felt the need of a judgment which could go as deep as the Moral judgment and have all its immediacy, but be as disinterested as Science without being Science. Meanwhile, Æsthetics were clamouring for a separate treatment and the unfinished woof of Teleology trailed across the warp of his system. Out of these coincidences across the Reflective Judgment, which

[1] *Briefwechsel*, p. 403. [2] Introd., Abbot, p. 267.
[3] Bernard, p. 16.

for Kant means a form of Experience which is not doctrine in itself but conditions whatever doctrine there is. Reflexion it is that has been guiding us all along; there is no knowledge but comes to birth with its inspiration in the anticipative feeling of unity with the object to be known; and even Morality is at best a form of reflective experience and only so far constitutive: "even Freedom . . . is for us a transcendent conception, and is therefore incapable of serving as a constitutive principle for determining an object".[1] We must not say, then, that Reflexion is a loose and therefore useless form of Determination, Scientific or Moral; it is Determination which is a fossilised or artificially restricted form of Reflective Experience.

It is time that this Fountain of all Experience were "critically" examined. It had already come under Kant's notice as the Hypothetical Function of Reason, and Kant, in so many words, deliberately speaks of this Hypothetical Reason as the Urteilskraft, the term he uses for Reflexion in general.[2] It is one and the same power of Judgment which we have in the *Dialectic* and in the *Critique of Judgment*. In this logical disposition of Nature (logische Beurteilung), the Urteilskraft exhibits a relation between Nature and the Supersensible: *i.e.*, even in knowledge, the Supersensible is present. But since the function of Urteilskraft is here purely hypothetical and therefore negative, it does not need special justification; it does not pretend to be a Science, it does not teach us nor equip us with knowledge, it is only an *exercise* of Reason ("der Verstand einer Belehrung und Ausrüstung durch Regeln fähig, Urteilskraft aber ein besonderes Talent sei, welches gar nicht belehrt, sondern nur geübt sein will"[3]). It is the specific quality in so-called mother-wit, the want of which no school can supply, or, as he said in the *Critique of Judgment*, the Urteilskraft is just "Sound Understanding" (gesunden Verstandes).[4] Every one feels the Absolute, the Whole, breaking in upon one's relative knowledge; one knows there is a Whole somewhere and proceeds on this assumption. This is the hypothetical function of Reason. But the need of a Critique arises when this Reflective exercise of Reason actually assumes the form of Science, professing to determine objects of its own, *without falling into antinomy*. Regulative Reason, whenever it pretended to be constitutive of objects, landed in insoluble contradictions, and therefore its exercise never rises above a form of inspiration; the Supersensible, in the shape of the Ideas of

[1] *C. of Judgment*, Watson, p. 336.
[2] Bernard, p. 4.
[3] Hartenstein, *Kritik d. r. Vernunft*, iii., p. 138.
[4] Bernard, p. 3.

Reason, is present in us as the anticipative feeling of Totality, indivisible Unity, a feeling, however, which is dissipated, and with it the real unity, in the exercise of Knowledge. As Kant puts it, "it has no immediate reference to the feeling of Pleasure and Pain".[1] But in Reflexion, as it appears in the *Critique of Judgment*, there *is* such immediate reference, the feeling of unity is not dissipated, and something, therefore, in the form of an *object* is determined by the *Urteilskraft*. "This reference is precisely the puzzle in the principle of Judgment, which renders necessary a special section for this faculty in the Kritik." Hence *Urteilskraft* in general, since it is purely hypothetical and negative, needs no special justification; it is the Judgment in the form of Immediate Feeling that must be established *a priori*.

Deduction, then, of Reflexion is the proof of the validity of this primary Immediacy of Consciousness which conditions all other forms of experience and is itself the highest form of experience. Of this Æsthetics provides the aptest illustration, but the problem itself is much wider. Reflexion, for Kant, covers all the different exercises of that free Consciousness, "I think," which lies in the back of the mind—*i.e.* all experience which is distinctively *personal*, as distinguished from Science which is largely impersonal, true for all and therefore for no one in particular, and also from pure Morality which for Kant must be depersonalised to the n^{th} power.

Kant's Deduction is characteristically peculiar. It consists in carrying back this primary function of Mind which is covered by such names as Reflexion, Purposive Activity and Feeling, to what he calls the Power of Judgment. Ostensibly he professes to find in the formal Judgment of Logic *a priori* principles for this third faculty, just as logical Concepts stood sponsor for the categories. If Understanding and Reason have yielded a system of synthetic notions for Knowledge and *a priori* precepts for the Faculty of Desire respectively, "what more natural," he asks, "than to suppose that the latter (Judgment) will contain principles *a priori* for the former (Feeling of Pleasure and Pain) just as well?"[2]

Such statements are not to be taken literally. Kant is dealing with Formal Logic as an analogy or type of the real activity, and this is shown by the fact that the formal concepts in the *Critique of Pure Reason* become added to and change, in the process of Deduction, into principles of synthesis. Similarly we are to find the Formal Judgment in this last Deduction, changing in process of proof into that original Free Conscious-

[1] Bernard, p. 4.
[2] *Über Philosophie überhaupt*, Rosenkranz, *Werke*, i., p. 588.

ness which conditions all experience, mediate or immediate. Kant significantly names it *Urteilskraft*, the Power of Judging in general, though he sometimes uses *Urteil* as equivalent for *Urteilskraft*.

There are two steps in Kant's curious proof. The one is found in the Introduction to the *Critique of Judgment*, the other in the *Über Philosophie überhaupt*.

1. In the first step, Kant points out that Judgment and Feeling must be intimately related, because they bear a similar relation to the two remaining Functions of Mind in the respective groups to which they belong. He calls it a "new ground"[1] of proof. Feeling mediates in a very real sense between Knowledge and Desire, and also the Judgment similarly mediates between Concepts and Reasoning. The former had already been settled by the Wolffians and may be taken for granted, but the latter, which Kant simply states in the baldest way, does call for explanation. Probably the best way to account for Kant's statement is to say that here Logic is changing in his hands. If Judgment mediates in any real sense between the two, it must have common nature with both; concepts, judgments and Reasonings can no longer be distinct as was formerly assumed. A Concept is a judgment from which the appearance of Synthesis has vanished: Reasoning is a form of Judgment in which the original Synthesis is further developed or explained. But surely that has the right to the name of Judgment *par excellence* which is the distinctively synthetic activity of Mind, in which the relation of whole and part is seen in the making? Understanding is for Kant the Faculty of parts without the whole—to determine the Whole is to court antinomy: Reason is the Faculty of Wholes without the parts—there is no differentiation of content in the Concept of Freedom, it is a case of all or nothing; Judgment alone is the function of Mind in which Whole and Part are first *recognised* in relation. The Judgment, then, may be said to mediate between the microscopic judgment or the Concept and the Extensive judgment or the Syllogism, because it is the *original* synthetic activity of Mind. It is no longer the Concept but the Judgment that stands first in the scale of mental activity.

Now when Kant assigns to the Judgment this original power of Synthesis, he does not mean a *particular* or actual synthesis—that is a concept—so much as the *activity* of synthesis itself in general, without reference to a particular

[1] Bernard, p. 14.

product, in short, *the Power of Judgment.* He thus re-establishes the distinction between Concept and Judgment, but in a way which does justice to them both. They are no longer different in nature, for both are modes of Judgment. But Judgment may be of two kinds; for while it is "the faculty of thinking the particular as contained under the universal,"[1] this subsumption may come about in either of two ways. First, both particular and universal may be to hand, *i.e.* the particular given is only such as can be determined by Concepts of Understanding; this is the Schematic Judgment: "the law is marked out for it *a priori*, and it has therefore no need to seek a law for itself".[2] Particular and Universal are adapted to each other by the pre-established harmony of the 'transcendental object,' and so the universal is applied to an intuition which can only be apprehended in that order which is necessary for determination by the categories. But, secondly, the particular alone may be given for which we have to seek a universal, and here the Judgment is no longer Determinant but Reflective. Thus, while the logical concept and judgment are both modes of judging, they are different, the one being the prototype of determinate, the other of reflective judgment. Why Kant calls it Reflective is not exactly clear. Probably he just means the activity in which the subject reflects on itself and its processes. The best explanation is given in the *Über Philosophie überhaupt.* "To reflect," he says, "is to compare and hold together given representations either with others or with its own Cognitive Faculty, in relation to an idea possible thereby."[3] That is to say, Reflexion is just the comparison of a representation with the Apperceptive Imagination. Kant goes on to give it a very homely meaning. We may call it, he says, the *Facultas Dijudicandi* (*Beurteilungsvermögen*), the term Baumgarten used to denote the Critical Faculty, the power of discerning agreement in difference, the answering of means to ends.[4] Nay, Reflexion even happens with animals, Kant continues, "if only instinctively, *i.e.* not in relation to an idea to be obtained thereby, but to an inclination to be somewhat determined,"[5] a sense of the term which seems identical with Aristotle's δύναμις κριτική.[6] In its basal form, then, Reflexion appears to be a sense of Want. But this may be of two orders. You may know what you are wanting, and then the Judgment is determinant; a category or "fundamental idea of the object prescribes the rule

[1] Bernard, p. 16.
[2] *Ibid.*, p. 17.
[3] Rosenkranz, *Werke.* i., p. 589.
[4] Erdmann, *Hist. Mod.*, p. 240.
[5] *Über Phil. überhaupt*, Rosenkranz, p. 589.
[6] *Anal. Post.*, ii., 99 B.

to the Power of Judgment,"[1] and therefore you no longer need a principle, its place being supplied by a rule. It is only for people who do not know exactly what they are wanting that a principle is necessary. The artist, having a great notion in his head, yet not knowing exactly what it is, casts about him for a principle, and in so doing lets his mind run free. This free-play of the faculties takes place when the mind is undergoing experience for which there is no corresponding category of knowledge adequate, whether it be in the apparently passive contemplation of æsthetic perception or in the originative activity of artistic creation. Nor do we need to know what we are wanting, even after it has been realised. In Reflexion, it is the *satisfaction*, not the definition, of purpose or interest that is essential; the free-play of the faculties is its own end: the mind has no interest outside of its processes. The great difference, then, which Kant has in view between the Reflective and Determinant Judgment is that the one is free, working under a principle, the other is not free, working under a rule which is fixed. Reflective Judgment is a "mere faculty for reflecting upon a given representation, in behoof of an idea possible thereby";[2] *i.e.* an idea which may be the very thing you want and so an idea which is realised as the definite concept of a given representation, in which case the judgment would become determinant, both part and whole being to hand. Reflective judgment always works with a view to Determinant, or, as if a Determinant judgment were actually possible.

It must be clear from the above that Reflective Judgment is the wider function of which the Determinant is but a special case. All thinking is the subsuming of a particular under a universal, *i.e.* of a sense-datum under a form of thought. And Reflexion is Subsumption in general, Determination is Subsumption in particular. In the Determinant, Epistemological or Schematic Judgment, Imagination, which is the highest faculty of Sense, subordinates itself to the law of Understanding. In apprehending a line, or drawing it even in thought, the imagination must keep reproducing the successive perceptions in order to maintain identity of Consciousness and therefore unity of the object: the object is cognised to order, it is what we are "obliged to think". But in Reflexion it is quite otherwise. Here the Imagination proceeds, not under constraint, but in free play with the Understanding; it is no longer what we are unconditionally obliged to think, but what we are constrained to think for higher reasons than the laws of Understanding.

[1] *Über Phil. überhaupt*, Rosenkranz, p. 589. [2] *Ibid.*

When Kant, then, says that the Judgment ought to provide this reflective Activity with *a priori* principles, he is looking to a certain feature in the Class-judgment which may serve as type for the freedom of Reflexion. The judgment in Formal Logic abstracts from all content, and therefore exhibits a quite contingent relation between S and P; and Reflexion is like to it in this, that the Subject (Imagination) is not fixed down to any definite Predicate (the Understanding), but maintains a free relation to it, whereas the transcendental or Determinant Judgment has for its predicate a certain unalterable rule, *e.g.*, the subject must come under the predicate of causal connexion. But in the judgment of Formal Logic, S may come under the class P or P^1 or P^2. Kant expresses this distinction thus: "the Understanding is the Faculty of rules, the Urteilskraft is the Faculty of *subsuming* under rules, *i.e.* of discerning whether something stands under a given rule or not".[1] Kant seems to speak here as if Reflexion were Formal Logic over again, but the latter is nothing more than a loose type of the former. For while the formal judgment abstracts from all content, Reflexion holds itself free rather because its content is so much deeper than that of the determinate judgment; thus, in regard to a living thing, it would be a mistake to bind S down to the Predicate of Causality, for it may be much more than that.

This seems to throw light on the title of the book, *Kritik der Urteilskraft*. It is a point on which writers on Kant have loftily abstained from giving any satisfactory explanation to the bewildered student, for it is not a little disconcerting to find that Kant, who had already used Judgment in a purely epistemological sense, should without further qualification or comment, also use it to denote specifically the Reflective activity of mind. The *Critique of Pure Reason* might well have been called the Critique of Judgment, for it deals with little else, but Kant has so consecrated the term to denote Reflexion that he speaks of the *Critique of Pure Reason* dealing with Understanding alone "to the exclusion of Judgment and Reason".[2] The explanation, it seems to me, lies in this, that for Kant the common feature in both Reflective and Determinant Judgment is subordination. But the Reflective is the higher and wider type of subordination; far from being the empty tautology of Formal Logic, it is the subordination of Nature to Freedom, whereas Determinant Judgment is but a subordination *within* Nature, that of Sense to Under-

[1] *Kritik d. r. Vernunft*, Hartenstein, iii., p. 138. [2] Bernard, p. 1.

standing: and it is Kant's final view that it is this wider subsumption of nature under Freedom which makes possible the lower adaptation of sense to thought; Determination, whether moral or scientific, is conditioned by Reflexion. Now the Formal Judgment provides the type for this higher form of Subsumption in the free relation it exhibits between S and P, and from it Kant would naturally take the name, *Kritik der Urteilskraft*. So we might read the above quotation as follows: the *Critique of Pure Reason* dealt with Judgment (*i.e.*, Subsumption in particular), to the exclusion of Judgment (*i.e.*, Subsumption in general without arriving at any particular determination) and Reason. Determination is fixed within definite limits, Reflexion has for its characteristic absence of determinate bounds; the Determinant judgment is like a land-path definitely marked, the Reflective is like the roadways of the open ocean: "thy way is in the sea, and thy path in the great waters, and thy footsteps are not known".[1] What Kant has secured for us, then, out of the Formal Judgment, is really a divine way of thinking, of which the forced subordination in Nature, *i.e.*, in the judgment of knowledge, is but the shadow. Hence the truth of Hegel's dictum, Freedom is the truth of Nature.

2. The second step in Kant's proof rests on the *Subjective* character of both Judgment and Feeling; "there is here already a certain conformity of the Power of Judgment to the Feeling of Pleasure . . . that whereas Understanding and Reason refer their representations to objects . . . the Power of Judgment refers *solely to the subject*, and by itself alone produces no notions of objects".[2] On the other hand, he points out, the Feeling of Pleasure and Pain is the only one of the Mental Powers which has nothing objective in its representations and is only the *empfänglichkeit* of a determination of the subject. In the first step it was shown how Judgment and Feeling respectively mediate in a real way between corresponding functions of mind. Now it is argued that their relative positions in the respective groups is so similar, in respect of their subjective aspect, that they must form part of one and the same mental function: "if the Power of Judgment should at all determine anything for itself alone, it can be nothing else than the Feeling of Pleasure, and conversely, if this (Feeling of Pleasure) ought to have at all a principle *a priori*, it will be found alone in the Power of Judgment".[3] Thus the object of the Judgment, in so far as it has one, seeing that it refers solely to the Subject, and the

[1] Psalm lxxvii. 19.
[2] *Über Phil. überhaupt*, Rosenkranz, *Werke*, i., p. 588. [3] *Ibid.*

subjective determination which we call Feeling, are one and the same.

But what exactly can Kant mean by the Subjectivity of the Judgment? To begin with, as we saw above, Judgment has come to mean for Kant the original synthetic activity of Mind; and although the Deduction in the second edition of the *Critique of Pure Reason* consists in the proof that the subjective reference in the Judgment presupposes an objective reference and is only possible through consciousness of objectivity, we must remember that, in spite of this, Kant makes a reservation; he insists that the 'I think,' the subjective element in the Judgment, is itself an *analytic proposition.*[1] He means that there is such a thing as *Cognition in general,* consciousness of the subject without arriving at any particular determination; and further, it is this *Consciousness in general* which makes possible the knowledge of the Understanding. But this never means for Kant that a purely subjective function of mind lies at the basis of all knowledge. An enormous confusion arises for us here, because we are thinking of a totally different contrast from that which was before Kant's mind, as different as from the Cartesian use of the terms subjective and objective. Objective for Kant, it cannot be too strongly urged, means no more than the objectivity of external sense; the sensuous perception of Inner Sense, the sense of Time in Imagination, is not for him objective—the proof in the Analogies which appears to base outer on inner Sense, the permanence of Substance on the Permanent in Time, should not be regarded as an exception to this, but as a fault in Kant's argument. What Modern Logic, then, means by objective in the Judgment, is what Kant has in view in the analytical Consciousness, 'I think': which differs from the objectivity of the Modern Judgment only in this, that it is not itself so much a system of Consciousness, an objective Consciousness, as the *basis* of all objective Consciousness. Kant's position nearly veers round to the Cartesian use of the contrast. They called subjective what is independent of individual mind, what underlies the sense-object, and what is this but Kant's 'transcendental object'? And, as Kant admits, the 'I think' of apperception is really indistinguishable from this *independent* or objective Mind. We should, therefore, hit off Kant's view more accurately, in view of the above confusion of terms, if we said that the 'I think' of the Judgment is not subjective, for this implies a false contrast with objectivity, but Personal as dis-

[1] Watson, *Selections*, p. 69.

tinguished from Divine or Absolute Mind. The 'I think' shares the nature of the 'objective synthesis,' and therefore may be said to lie at the basis of all knowledge. It is subjective in the sense that it is personal and free from the obligation to think the objects of external sense.

The student is more and more impressed with the intimate relation which the third Critique bears to the first.[1] This subjective character of the Judgment may be put in yet another way. It is the same feature Kant is hinting at in the contrast he makes between Productive and Reproductive Imagination, in the chapter on the Deduction of the Categories. The Reproductive function belongs to Psychology, the Productive alone to Transcendental Philosophy, and "its synthesis is the expression of spontaneous activity".[2] Reproduction is an empirical synthesis of Imagination in accordance with the laws of Association, but Imagination in its original function is the "faculty of setting before the mind in perception an object that is *not itself present*":[3] *i.e.* though it may make use of association in its free activity, it is not led by it but leads it, "for unlike sense, imagination is not simply capable of being determined, but is itself determining".[4] There is no such thing as a purely contingent Fancy which outrages all the forms of knowledge, and certainly Productive Imagination is no such contingent activity; rather it conforms to the categories while it constructs its figurations without reference to any definite object, *i.e.*, without compulsion of external sense or fixed direction of association. Hence Kant calls it the "first application" of Understanding to Sense, and so "the condition of all other applications of Understanding to objects that we are capable of perceiving".[5]

There is, then, after all something profound in Kant's deduction of Feeling from the Judgment. He begins with the Judgment of Formal Logic, and this changes in his hands into the Reality of which it is but the type, the Original Synthetic Activity of Mind. The proof is really reversed and is, that Determination is a subordinate form of Reflexion. The usual criticism is that he has violated the nature of Feeling, particularly æsthetic, by reducing it to a form of intellectual cognition. In point of fact, he does quite the opposite. While in seeming he brings Feeling back to functions of knowledge, in the process of proof he lifts up knowledge into relationship with the Personal, free activity of Mind. Reflexion is not debased to Understanding

[1] *Cf.* Anna Tumarkin in *Kantstudien*, Band xi.
[2] Watson, *Selections*, p. 77. [3] *Ibid.* [4] *Ibid.* [5] *Ibid.*, p. 78.

but Understanding is elevated by its subordination to Reflexion. Kant, indeed, suggests that the fixed forms of the Understanding were originally spontaneous in their activity. When we go beyond the limits of Understanding as it is now known to us, *i.e.*, go beyond causal connexion, and freely classify Nature into genera and species "reflectively," our "reflexion" is characterised by the feeling of Pleasure, the mark of spontaneity. And though we no longer feel pleasure in contemplating the fixed corrections of Understanding, yet it must have been there "at one time," and "it is only because the commonest experience would be impossible without it that it is gradually confounded with mere cognition and no longer arrests particular attention".[1] Determinate judgments are fossilised "reflexions" upon Nature; these unchangeable forms and connexions of Understanding had to be discovered at one time, and their discovery was no doubt attended by the inseparable mark of all spontaneity, Pleasure. What takes place in the History of the Sciences is repeated in the growing consciousness. For the child each established law of Nature, when it first secures the attention, is a lucky hit of Reflexion, a fresh discovery.

There is a deeper suggestion here. The bounds of Understanding are not fixed but stretch with the advance of Science. Science feeds the forms of Philosophy with their content progressively. In the light of Evolution, we should now add to Understanding part of those forms of Teleology which for Kant were wholly contingent and reflective. Scientists largely destroy for themselves the pleasure which the forms of adaptation in Nature afford the unsophisticated mind, and later, through their knowledge, the general consciousness comes to feel

> "that there hath passed away a glory from the earth".

But there must be a limit to the encroachment of Understanding. If it be the case, as Kant suggests, that the original function of Mind is the Spontaneous, if Productive is the condition of Reproductive Imagination, if the free, personal consciousness, 'I think,' be the condition of consciousness of the objectivity of sense-perception and independent of it, then it must lie in the power of this original function to maintain a distinct realm for itself, otherwise the Understanding would devour its parent. There is a limit to the encroaching of the land upon the sea, whose trackless ways best typify the judgment of Reflexion. Therefore Kant

[1] Bernard, p. 28.

is right when he makes Understanding, with its fixity, a distinct compartment of Mind from Reflexion. He may have drawn the limits prematurely, but, in the long run, its Kingdom has an end. It is not likely that the Mind will surrender its spontaneity in the realms of the Finer Emotions connected with Art, Morality, and Religion. Teleology may linger between the two worlds of determined and free activity, and it cannot wholly surrender to Understanding; the truth may be that it is the bond of union and transition between these two worlds: Kant seems to take this view in the half-hearted way he connects it with æsthetic purposeness. But the objects of the Fine Emotions are the private grounds of the Sovereign Freedom of Reason which Understanding invades only to court defeat. In this sense M. Basch is right when he says that Knowledge and Will are sterilised products of feeling: "the individual is more truly himself when he feels": habit, without doubt, blunts "le timbre sentimental de la sensation". But, he concludes, there is one sphere where Feeling regains its ancient empire, where man is concerned, neither to know nor to will, but before all to feel; where representations re-become what they have been from the beginning, the creations of Feeling, and that sphere is the Æsthetic.[1]

If this is what Kant means by Reflexion, if this is the Crown of his Philosophy, he has to offer us what it were well to accept, a way of thinking which has all the originality and immediacy which Pragmatism demands, without its vicious empiricism.

[1] *L'Esthétique de Kant*, par Basch, Introd., p. xiv.

V.—DISCUSSIONS.

MR. RASHDALL'S DEFENCE OF "PERSONAL IDEALISM".

THE reply of Mr. Hastings Rashdall, in MIND for January, 1909, to some remarks of mine on "Personal Idealism" do not seem to me to meet the difficulties which I found in his article on "Personality: Human and Divine" when I first read it. To examine in detail the twelve pages in which he has replied to my six of criticism would require much greater space than I could reasonably expect to be allowed, and, apart from that, I do not think that minute replies and rejoinders are likely to lead to any good results. The hypothetical biography which he seems to have constructed of me, when he says that he is "not disposed to think that philosophy has stood still since the days when Prof. Watson was a student at Glasgow," is hardly consistent with his expression of "sympathy, agreement and respect" for "most" of what appears in my book, or with his opinion that "the difference between us is less than I suppose," since I am "free or comparatively free from many of the tendencies against which 'Personal Idealism' is a protest".

It is a good many years ago since I first made acquaintance, in Prof. Pringle-Pattison's *Hegelianism and Personality* (1887), with a doctrine closely resembling, if not identical with, what is now known as "Personal Idealism"; and it seemed to me then, as it seems to me now, that, so far as it was true, it did not differ from what I had been accustomed to call "Idealism". For I have never understood that "Idealism" denies that there is a distinction, though not a separation, between self-conscious 'persons' and beings that are not self-conscious; nor is there any reason why it should deny that God is a self-conscious 'person,' provided the term 'person' is not understood to mean a being who in his existence is a separate individual, while in his knowledge he is somehow aware of the existence of individuals other than himself. But, while "Idealism" did not seem fairly open to the charge of abolishing 'personality' and logically leading to "a naturalism which for all practical purposes is indistinguishable from materialism" (*Personal Idealism*, p. 378), "Personal Idealism," unless I am entirely mistaken, does hold that 'personality' implies separation in existence, though it admits of comprehension or inclusion in the way of knowledge. This was the point to which I directed my short criticism, and Mr. Rashdall must forgive me for saying he has not convinced me that his doctrine

is not logically open to the objections I made to it on the ground that he separates between knowledge and existence, and thereby lays himself open to the charge of explaining the manner in which the subject is supposed to get beyond his own 'states' or 'ideas' by the doctrine that his ideas somehow 'represent' what is not actually within the circle of his consciousness. Why, otherwise, does he limit 'reality' to 'souls' or 'spirits,' apparently excluding from the title all inorganic beings? The objections that I made in my book are all logical deductions from this assumption, and are of the nature of a *reductio ad absurdum*. It is not to the point that other statements, inconsistent with the distinctive doctrine, are made, chiefly, as I cannot but think, on the basis of popular ideas. I may be wrong in thinking that one cannot separate the existence from the knowledge of the self without contradiction, but, until that objection is met, I do not feel that I have exposed myself legitimately to Mr. Rashdall's vials of wrath. "Idealism," as I understand it, has no need to maintain that "things" have no independent reality, because it holds that plants, animals and men, though in a less degree, have no independent reality either—in short, that there is no "reality" in the strict sense of the term except the totality of being, which includes all forms of existence. At the same time "Idealism" does not affirm that "things" have any existence apart from mind: it co-ordinates "existence" and "knowledge," unlike "Personal Idealism," the *raison d'être* of which, as I understand it, just consists in maintaining that there is a "difference between knowledge and reality" (*Personal Idealism, passim;* see especially p. 390, note).

Mr. Rashdall wishes to know how I could suppose that "Personal Idealism" is open to the objections raised against Solipsism? Passing over the remark in his article that Solipsism "like Scepticism admits of no decisive refutation, but carries no conviction" (*Personal Idealism*, p. 389)—which hardly agrees with his appeal to Mr. Bradley's *Appearance and Reality*, all the arguments in which against Solipsism he claims the right to use (MIND, 69, p. 109)—my answer is that "Personal Idealism" makes what seems to me the fundamental mistake of reducing consciousness to 'ideas' which, when they are 'ideas' of other 'persons,' are not *identical* but only *similar* to the ideas in the minds of other persons. Mr. Rashdall (MIND, p. 114) invokes a cloud of witnesses in favour of what I suppose he would call "hard" idealism, among them Mr. Bradley. To Mr. Bradley therefore I may take the liberty of referring him for the distinction between 'identity' and 'similarity'.

"Personal Idealism" seems to me to rest upon the assumption that, because every mode of existence has a meaning only for a mind, it follows that nothing exists except mind. I am not prepared to endorse this assumption without a re-interpretation of the term 'mind'. Certainly a world not knowable by a mind—a world that is not the embodiment of mind—is unthinkable, because for

mind—any mind whatever—it would be absolutely unintelligible. A world of this nature cannot possibly exist, as I believe, because we should have to maintain that there were two different and uncombinable orders of existence, mind and nature, and that what is true of the one is in no sense true of the other. But what this shows is merely that any element of reality, when taken in abstraction from the other elements which go to constitute it, becomes unintelligible. But, while I admit, or rather contend, that nature has no independent reality, I am unable to see that it ceases to be 'real' when it is taken as merely an element in the whole; for then its self-contradictory character disappears. If "Idealism" denies the reality of inorganic things as elements in a rational or intelligible whole, I do not see how I can ever accept it. "Idealism," as I understand it, does not affirm that "all reality lies in souls and their experiences"; for 'souls' would have no 'experiences' apart from the not-self, whether the not-self assumes the form of inorganic things or of plants, animals and men. Is this "Dualism"? Mr. Rashdall says that "Dualism" is no less Dualism because we are told that the subject is as necessary to the object as the object to the subject, if the object be thought of as something that exists quite independently of being willed by the mind which is compelled to know it, but which may yet (for anything that such a philosophy has to say to the contrary) be constrained to pronounce it very bad. Such a view is none the less Dualism because the object is understood to be an 'object of thought' and not the 'matter' of the materialist" (*Personal Idealism*, p. 378). "Naturalism" or "Materialism," we are told, is "the natural development" of the philosophy of Green, "which really banishes the idea of activity, not merely from its idea of God, but in truth from its conception of the universe as a whole". I am not "going to lay hands on my father Parmenides," but I may go so far as to say that Green's refusal to admit that the ultimate principle of all things can be defined other than negatively, though we may legitimately infer by analogy that it is "spiritual," seems to me to have been due to a temporary lapse of reason on his part, and to be in fundamental discrepancy with the principles of his philosophy. In any case I think it may be shown that "Idealism" by no means leads to "Naturalism" or "Materialism," but on the contrary proves it to be an utterly untenable doctrine.

Much of current speculation seems to me to overlook the distinction between our first inadequate view of the world and a really comprehensive and self-consistent doctrine. To one who strives to be true to the highest form of knowledge, it seems obvious that there are three main ways in which existence or reality may be conceived. The first and most natural way is to look upon the world as made up of particular 'things,' each of which is 'real' or has an existence of its own quite independent of all other things. No doubt, when we come to consider that things are in the same

space and time, and exhibit resemblances, differences and orderly sequences, we do as a matter of fact connect them in our minds, but the 'relations' thus introduced are not at this stage regarded as in any way affecting the 'solid reality' of the things so compared. Nor does it matter that 'things' are made up of 'parts'; for it is assumed that these 'parts' must themselves be 'real' and independent; and therefore the 'things' that we ordinarily regard as 'real' are conceived to be simply 'aggregates' of smaller 'reals'. If this doctrine is pressed to its logical consequences, it dissolves the world into an infinity of disconnected particulars, each of which would be equally 'real' if all the other things were annihilated. The logic of this doctrine is the 'law of contradiction,' interpreted to mean that a thing is absolutely 'unique' or 'individual' (or whatever term is employed). And the same mode of thought, when applied to the mind, results in the doctrine that each 'self' is 'unique' or 'individual,' and therefore that, if the 'self' knows the 'object,' it must be because the 'object' is a 'part' or 'mode' of itself. I do not deny that "Personal Idealism" contains elements incompatible with this individualistic point of view—for in "Personal Idealism" I have not been able to find any one consistent doctrine—but it seems to me that its perpetual insistence upon the 'reality' of the 'personal subject' is due to the assumption, that if the subject cannot exist apart from the whole, it is not 'real' at all; in other words, that every 'real' self must, in 'existence' though not in 'knowledge,' be 'individual' in the sense of being absolutely impervious to all other individual beings, not excluding God; and that, as a logical consequence, "Personal Idealism" is bound to hold that there is no 'whole' except what the human intellect frames for itself as the result of the external comparison of a number of separate and independent individuals; or, what is the same thing, that the universe is not an organic whole but an aggregate. "The Absolute," says Mr. Rashdall (*Personal Idealism*, p. 392), "consists of God and the souls, including, of course, all that God and those souls know or experience." No doubt he adds that "the Absolute is not a simple aggregate formed of these spirits, as each of them is if taken apart from the rest, but a society in which each must be taken with all its relations to the rest"; but as this seems to mean that each soul as well as God is separate in existence, though it also knows other souls, I cannot help thinking that Mr. Rashdall has not freed himself entirely from the fallacy of separate or individual things. It is for this reason, as I conceive, that he practically denies that there is any "Absolute" or "Infinite Being," and as a consequence denies that it is another name for *God* (*Personal Idealism*, p. 392).

When by further reflexion it becomes apparent that the first view of things is untenable, since no object can be found that does not in some way depend on other objects, the doctrine formulated is, that there are no independent 'things,' and that 'relations' are

by no means due to external comparison, but are absolutely essential to the reality of anything whatever. This doctrine is implicit in the Newtonian law of gravitation, which insists upon the essential relativity or interdependence of things, and indeed it is the natural doctrine of those who are engaged in scientific pursuits, though they very rarely get rid of the imperfection of the first view of things and usually hold both side by side. Now this phase of thought, when pressed to its consequences, virtually denies, not only that there are 'individual' things, in the sense of separate or unrelated objects—which it has a perfect right to do—but that there are 'individual' things in any sense whatever. If A depends upon B, B upon C, C upon D, and so on *ad infinitum*, we shall in vain search for a principle which is the absolute source of anything. This mode of thought, therefore, is the basis of all phenomenalism, and if applied to mind it results either in its reduction to a series of 'modes' or 'states,' discrete or continuous—the former being the view of the older empiricists, the latter of such "radical empiricists" as Prof. James—or in hypostatising it as something lying *behind* these 'modes' or 'states' which cannot be further defined. Seeing clearly that there are no separate and independent things, it naturally infers that no 'real' thing can be known, because nothing can be found which is not a passing phase in a perpetually changing world. No doubt it grants that changes occur in a regular way, but it denies that we are entitled to say there is any absolute law of those changes.

The revolt from this second stage of thought is very apt to lead to the doctrine that, as there are no separate *objects*, and as individuality must be found somewhere, we must, to preserve individuality, fall back upon separate *subjects*. Accordingly, it is admitted that there is no independent 'reality' in the world of objects, but it is contended that such 'reality' *is* found in 'souls' or 'spirits' or 'minds'. As I have already said, this seems to me an untenable way of defending 'reality'. It abolishes distinctions which are inseparable from the world as presented in our experience, and in so doing destroys any tenable defence of "Idealism". I should therefore attack the problem in a different way.

What is the mistake of the first view of things, which affirms that all 'reality' consists of separate, and therefore virtually of self-existent things? Its mistake is in overlooking the universal process which is involved in each thing, a process without which it could not exist or be known. This universal process is not due merely to the external comparison of one thing with another, but implies a vital objective activity which is essential to the 'reality' of the thing. This is the fundamental point. The principle of gravitation, for example, is not merely a "working conception," as some "personal idealists" seem to hold, but it is an actual cause, operative in each atom or particle of matter and constituting its very nature. Nor will it help us to say that each thing *resembles* another: for no

valid universal law can be based upon *resemblance*, but only upon *identity*. If it is said that the law of gravitation is an 'abstract idea' or 'conception,' and that no 'conception' can be adequate to reality, I answer that in that case knowledge is simply an impossibility. Mr. Rashdall refers me to Mr. Bradley's distinction between an idea as 'psychical event' and an idea as 'content' (MIND, 69, p. 105), and upon this distinction he seems to rely for an explanation of the knowledge of what is other than self. I am unable to accept Mr. Bradley's view, which seems to me to be based upon a confusion between an 'image' and a 'conception'. It is on this ground, as I believe, that Mr. Bradley finds the idea of space, time, cause, self, and indeed all the modes in which we characterise reality to be self-contradictory—though he partly withdraws his censure when he comes to treat of the "degrees of reality". It is perfectly true that it is impossible to comprehend space, time or causality when the attempt is made to do so by the imagination, *i.e.*, by an accumulation of 'images'; but it is just because imagination cannot represent the infinity of space or time, or the absoluteness of causality, that we are entitled to affirm their infinity and their reality as conditions of knowledge; for if our 'conception' or 'thought' of them is no guarantee of their real nature, we should not know that imagination cannot fully represent them. Certainly, if 'conception' is merely a "bloodless category," it must want the concreteness of 'reality'; but a 'conception,' properly understood, is the grasp by thought of a living principle which is the very soul of 'reality'. To frame an 'image' of an oak is no doubt to form an abstraction, but the 'conception' of an oak comprehends all possible individual oaks, which, however much they may differ from one another, must agree in being dependent upon the energy by which they are produced. A 'conception' therefore corresponds, not to the particular oak, but to the energy by which this, and all other, oaks are produced. Thus thought, and thought alone, comprehends reality: for only thought can grasp the living energy without which nothing whatever could exist. There can, in fact, be no perception of reality at all without the activity of thought in the formation of conceptions. To anticipate the usual common-place objection, I hasten to add that this activity of thought is independent neither of feeling nor of will. It expresses, however, the necessary conditions under which only the real world is possible or knowable.

To comprehend reality it is necessary to go beyond this second or 'relational' point of view; and Mr. Bradley is therefore right in maintaining that "all relational modes of thought are self-contradictory," or, as I should prefer to say, are self-contradictory when taken as ultimate. The mistake of this mode of thought lies in its assumption that all thinkable reality must be relational or dependent. For, when reality is so conceived, the mind is necessarily forced upon an infinite series in the attempt to characterise it, and obviously an infinite series can never be summed up or com-

pleted. If we could reach the whole, it is assumed, we should grasp reality as it is; but as the series of dependent particulars is endless, the attempt necessarily proves abortive. When, however, we look more closely at this method of conceiving reality, it becomes manifest that it has virtually refuted itself. If it is true that nothing comes within our experience except dependent beings, we can never reach a true cause at all, but only one that is a link in an endless chain, the first link in which it is therefore impossible to discover. Evidently, the reason why the mind cannot be satisfied with this view of things is that such a series does not take us beyond a 'reality' that is 'dependent,' and we therefore affirm it not to be true 'reality' but only 'appearance'. Thus we tacitly assume that only that which is self-dependent can be 'real'. Dependent being, in other words, presupposes self-dependent being. But there can be only one absolutely self-dependent being: and therefore man, like other forms of being, can only be self-dependent in so far as within him there is operative the same principle as that which manifests itself in all other modes of being, though in beings lower than man it never comes to self-consciousness. The whole force of this contention, however, seems to me to be vitiated when an attempt is made to show that in his existence man is self-dependent, while in his knowledge he is dependent upon what is other than himself. It is not surprising that one who adopts this point of view should hold that "God," as Mr. Rashdall puts it, "is certainly limited by all other beings in the Universe, that is to say, by other selves, in so far as He is not those selves" (*Personal Idealism*, p. 390), and therefore that God's "power" is "doubtless limited". I confess that a finite God seems to me the greatest of all absurdities; nor can I see how Mr. Rashdall can legitimately establish the existence of God at all on that supposition. The category of the finite presupposes the category of the infinite, as Descartes long ago perceived, just as that of 'relativity' implies the 'non-relative' or 'absolute'. Why, on Mr. Rashdall's view, should we stop with a single finite God, and not go on to infinity in search of an ultimate unity? Does not the finite necessarily presuppose something beyond it? I am not surprised that Mr. Rashdall should find himself "embarrassed" (*Personal Idealism*, p. 391) in his attempt to characterise a Being, who is not the "Absolute," but is at once omniscient and yet is limited in power —limited, we are told, because "in the frank recognition of the limitation of power lies the only solution of the problem of Evil which does not either destroy the goodness of God or destroy moral distinctions altogether" (*Personal Idealism*, p. 391).

This rough sketch of what I understand by "Idealism"—which, I fear, may appear too dogmatic from the necessity of compression —may perhaps serve to indicate wherein it differs from "Personal Idealism". The former maintains that there is no division between knowledge and reality in principle, and therefore no separation between any mode of existence whatever and any other. It denies

that there are 'objects' which exist only in the individual mind of this or that person, and indeed it rejects altogether the conception of 'reality' as divided up into separate 'things'. On the other hand, it denies just as emphatically that 'things' can be resolved into 'states' of the individual 'subject,' maintaining that external 'things,' or 'matter,' is as real in the *whole* as individual 'subjects' or 'minds,' and indeed that unless it were so, there would be neither matter nor mind. At the same time, while this form of "Idealism" recognises the relative truth of the second or scientific stage of thought, which interprets reality as a system of 'dependent' beings and therefore refuses to admit that there are any 'independent' things to be found in the world, it denies that this method of thought is ultimately satisfactory, maintaining that it unwittingly presupposes that true reality must be self-dependent, and therefore self-causing and self-differentiating. Thus, it reaffirms the individuality of things in the whole while denying their separate reality; and the whole it views, not as a mere aggregate, but as organic and spiritual. All forms of being, from the material particle to the most developed human intelligence, it regards as unreal and impossible apart from the whole, but as real and necessary in the whole. And it further maintains that the only perfectly self-dependent, self-acting, and self-differentiating unity must be self-conscious, not because it is isolated or independent either in existence or in knowledge, but because it is perfect intelligence which manifests its nature in all modes of being, but most fully in and to man. This unity may therefore be called the Absolute or God, according as we are viewing it from the reflective or the religious point of view, but it is Absolute or God only because it is infinite in the sense of involving all possible reality as its manifestation. No doubt there are difficulties connected with this conception, but they do not seem to me insuperable, while the separately existent and finite God of "Personal Idealism" I can only regard as a fiction of abstraction.

JOHN WATSON.

MR. HALDANE ON HEGEL'S CONTINUITY AND CANTORIAN PHILOSOPHY.

In Mr. Haldane's interesting article on 'The Logical Foundations of Mathematics' there seems to be an attempt to institute an illusory comparison between two conceptions which are really quite distinct, —Continuity as understood by Hegel, and Continuity as understood by Dedekind. When Hegel claims that Continuity and Discretion are both Moments in Quantity, he appears to interpret Continuity as the unity of a class containing diverse members; it is the community of property which enables us to speak of a quantity of anything, provided this unity is not regarded as a mere isolated connotation (intension), but as a connotation realised in a denotation (extension). What else can he mean by saying,[1] 'Die Kontinuität ist dieses Moment der Sichselbstgleichheit des Ausseinanderseins'. The Discretion, on the other hand, is the denotation regarded as realising the connotation. Discretion is the *diversity* in conceptual unity, Continuity is the conceptual *unity* in diversity. The illustration given in the Smaller Logic (Wallace's translation, pp. 189-190) supports this interpretation: the magnitude consisting of a hundred men (he says) is continuous as well as discrete, "and the circumstance on which this continuity depends is the common element, the species man, which pervades all the individuals and unites them with each other".

Kant's use of the term Continuity is different from this and is closer to—though less complex than—Dedekind's. He attributes Continuity to Space and Time on the grounds that there is no smallest part of either, and to Change for a similar reason, that between any two states of a changing phenomenon there is always a difference. This is fundamentally the same conception as what Mr. Russell calls 'Compactness' in a series, which means that between any two members of the series there is another member (*e.g.* points on a line or the rational numbers in order of magnitude). Hegel's Continuity is not however *serial* Continuity; it is rather the pure conception of cardinal number, in which there is no rank or serial arrangement made explicit. The distinction between cardinal and ordinal number comes later with Hegel (though he does not use this terminology) in the distinction between *intensive* and *extensive* magnitude. Intensive magnitude is *position* on a scale *e.g.* a speci-

[1] *Wissenschaft der Logik*, first chapter on Quantity.

fic degree of heat as marked by the thermometer. Surely Hegel does not assert that there must be a member between any two members of a series before the quantity involved can be said to possess continuity? The Hegelian Continuity would in fact be a property of Space even if straight lines and figures were composed of finite numbers of *minima sensibilia* (as Berkeley thought).

Dedekind's Continuity and all allied forms are predicated of series alone, and have no meaning as applied to a mere group of objects not arranged in order. As involving serial compactness they should perhaps be regarded as a development of the Kantian less complex conception, which, as I have said, is the same as Compactness.

It must be remembered, further, that the continuity of a *function* is not the same thing as the continuity of a *series*, although Mr. Haldane (I know not why) seems to think that they are both forms of Hegelian Continuity. One would like to know exactly, and without vagueness, the stages of the dialectic process by which the connexion is established.

There is another aspect of Mr. Haldane's article about which one would like some more information from him,—the implication, namely, that the Cantor-Dedekind movement has only a mathematical and not an epistemological significance. Until further light is thrown on the subject, I shall continue to believe that Cantor's theory of the Transfinite (in its earlier stages) is explicitly a new metaphysical departure, that it is one of the most remarkable developments of pure Philosophy, and that, as such, it must influence epistemology, unless epistemology will divorce itself from Philosophy, and from every exact inquiry. The philosophical work in this movement I should describe as the exact ideal conceptualisation of the immediately given, and this work I think both Kant and Hegel recognised as belonging to philosophy, if not exhausting it. One result, for instance, has been that the Mathematical Antinomies have been solved in a way impossible for Kant and Hegel, for precise analysis has failed to discover any contradiction in the conception of infinite number. Indirectly, too, the Kantian phenomenalistic intuitionism can be refuted by exposing its inner contradictions, and contrasting it with a theory which does not contradict itself. The usual escape from the Antinomy of *Theilbarkeit* is that given by Aristotle, approved by Kant and Hegel, and revived every now and then as a new discovery—that the infinite divisibility of Space, Time and Matter is only a "possibility". This theory, however, leaves us still in the frying-pan, since the 'possibilities' of subdivision must be actually finite or infinite in number, and thus we must vote for either Berkeley or Cantor. Hegel, indeed, gave the clue to the right solution of the Antinomy of the Limits of the World, pointing out that it arose from the contradiction inherent in finite intuition *per se*, not from a contradiction of the World with itself. But he failed to see that the concept of actually infinite number is required to justify his position. Kant's method of escape reminds one of the

gymnastics of the ostrich, who thinks that there is no danger so long as he does not *intuite* it. It follows logically from the Kantian solutions (in both antinomies) that the number of points or subdivisions of a line is the number that you choose to imagine, that the limits of Space are, say, the furthest visible objects (these limits varying with the light!), and that Time began at the first remembered event of your life. Intuition must fix such limits, but on the other hand cannot imagine them, and is thus in hopeless contradiction with itself. These antinomies, far from verifying (as Kant thought) Transcendental Idealism, are the strongest refutation of its cardinal doctrine, that Space and Time objects exist only as objects of perception.

R. A. P. ROGERS.

VI.—CRITICAL NOTICES.

Structure and Growth of the Mind. By W. Mitchell, Hughes Professor of Philosophy, University of Adelaide. London, Macmillan & Co., 1907. Pp. xxxv, 512. Price 10s. 6d.

The sincere apologies of the present reviewer are due to Prof. Mitchell for the long delay in the appearance of this review. Prof. Mitchell may be assured that his book was not laid aside and forgotten; on the contrary, it was read with the greatest interest and appreciation immediately on its receipt, and it was only an unforeseen change of position, bringing with it greatly increased work under unfamiliar conditions, which has until now made it impossible for me to put this appreciation on paper. Fortunately, there cannot be much doubt that any competent reader will have recognised the splendid qualities of this book without any recommendation on my part. And the delay has had one advantage: it has given me time to make some use of the book in actual teaching. And, judged by this severest test of a text-book, the good opinion formed of it on the first reading has been abundantly confirmed. I have no hesitation in saying that Prof. Mitchell has written one of the very best books on Psychology that it has been my pleasure to read. It stands out head and shoulders above the level of ordinary text-books. In method it is singularly free from the lifeless abstractions which make the 'science of the soul' so often tedious and unconvincing, because one finds it impossible to recognise in it a description, let alone an explanation, of the procedure of living minds. And as for matter, though it is a book concerned with principles rather than with details, it deals with masses of facts which most books on Psychology completely neglect. Even the expert in Psychology will, I think, find a good deal to learn from this book, both where it treats psychological problems in a novel way, and where it merely sums up accepted doctrine in a neat formula. And I know of no book which I would put with greater confidence into the hands of a capable Honours student, after he has made himself familiar with one or two of the more elementary text-books. But it must be an advanced student, for this is no book for beginners. Of that the author rightly warns us in the Preface: 'It is not an introduction to psychology in the usual sense of an elementary survey, but in the more technical sense of an introduction to a work with which

we are more or less familiar' (pp. ix, x). In fact it is an introduction to psychology where we regard psychology itself as the 'proper introduction to philosophy,' and mean by it 'knowledge of the system of experience, or of the structure and growth of the mind' (p. ix). The book does not try to supplant other text-books, but to supplement them, by furnishing a fuller discussion and criticism of psychological principles.

In a book where almost everything is good, it is hard to single out special points for praise. But four recurrent features of the general treatment are specially valuable: (1) the constant pointing out of errors and confusions, both such as we are betrayed into by the metaphors of current speech, or the superficial theories of popular thought, and those more subtle ones which are due to the adoption of false scientific conceptions by psychologists themselves. Thus chapter ii. 'The Explanations of Experience,' contains some trenchant criticisms of the attempts to split up the mind into 'elements' and then to apply conceptions borrowed from physics or chemistry to the explanation of their combination. Prof. Mitchell will have nothing to do with a psychology which treats 'perceiving, conceiving, believing and expecting, interest and attention' not as 'functions of our mental life whereby it thrives in the world' (p. 318) but as mere 'fusions' or 'colligations' of sensational elements. (2) The frequent references to education, both by way of illustration of true psychological doctrine, and by way of criticism of false educational theory and practice. As a typical example of the former sort of reference we may take the distinction between *instruction* and *discipline* in education as based on the psychological distinction within a thought 'between the thinking and what is thought' (p. 64). 'By instruction a teacher communicates a definite subject-matter, a doctrine, a fact; by discipline he communicates his ways of thinking and knowing,' in short his intellectual handling of the subject-matter, just as in moral education, instruction gives ideas of what is right and wrong, but discipline only can give an 'effective desire to do what is thought to be right'. Again the remarks on the use of literature in education (p. 149) deal tersely and lucidly with a subject famous since Plato's *Republic*. Psychologically the question is of 'Einfühlung,' the application to education comes in because 'what is read of people is not merely understood, it is always more or less lived as we live with the people in a novel or on the stage, needing no moral nor epilogue to point the lesson. It serves for a rehearsal of realities to come; it is a way to reverence and aspiration, and the only way of presenting evil with safety, and as a thing contemptible and detestable, and not only liable to punishment.' And this is followed by: 'In this living ['Einfühlung'] there is also the best discipline that the study of nature offers in the education of the young'. Interesting is the remark (p. 340) 'it is not a bad notion that an intelligent youth should be able to read the newspapers intelligently'; interesting also the warning not to 'confound general

intelligence with general information' (*ibid.*) against which we must put the supplementary caution (p. 382) against a purely formal training, a sharpening of the wits with a minimum of knowledge of facts 'as if cleverness can be clever without material'. Very excellent too are the decisive criticisms of the idea that education must follow some abstract logical scheme, such as a classification of the sciences (p. 344). Again: 'it is doubtless wrong to begin formal apart from material studies, *viz.*, language apart from literature, mathematics apart from things, and to begin the study of nature from the point of view of any of the sciences; and the shortest way is not always the best for knowledge and interest, let alone for mental discipline' (p. 445). The proper principle for the order of studies is *growth of the mind* as ascertained by psychology. 'Every teacher will frequently let his pupils feel their own errors' (p. 445) is another good remark. And the whole chapter xvii. may be recommended as containing a most useful discussion of the relation of 'nature' and 'nurture' in the growth of the mind, and a much-needed protest against the fashionable modern doctrine of *laissez-faire* in education, as if the task of parents and teachers were merely negative, *viz.*, to remove obstacles and dangers to natural growth. 'For not only is nature in the young not always right . . . but there never was a nature . . . that did not need the spur and a driving from good to better' (p. 438). I have, so far, merely singled out a few of the passages in which education is explicitly mentioned, but the whole of the book is full of discussions which can be made to bear on education, as *e.g.* the constant references to child-psychology; the discussion of curiosity (pp. 245 and 287); stupidity (p. 376); originality (p. 350); and in fact the whole treatment of the development of mind from sensory to perceptual and conceptual intelligence through 'learning'. And, on the other hand, the author does not overlook, as so many psychologists writing from the same point of view have done, that there is a mental growth *not due* to learning but to years, and temperament, and vigour, just as not all mental decay is due to nature, but also to nurture (p. 434).

(3) The third valuable feature is the very full and instructive analysis throughout the book of æsthetic experience—in fact, Prof. Mitchell in chapters vii. and viii. on 'Fellow-feeling and Individuation' and 'Absorption in an Object' gives us the only full account in English of the important doctrine of 'Einfühlung' with which I am acquainted. But as I have to say something by way of criticism on his treatment of this doctrine, I will go on at once to mention as fourth point:—

(4) The delightful discussions, particularly in chapter xvi. of the psychological facts from the region of intellectual, moral, emotional character, self, will, or whatever we may call it,—the sort of facts for the penetrating analysis of which we are wont to praise the psychology of a novel or a drama, but of which so little ever appears in the text-books of psychology. The only scientific treatment of them

that exists is generally to be found in the psychological parts of ethical treatises. Perhaps it is that the very use of these facts in literature has given rise to a prejudice against them as merely popular and incapable of scientific treatment. In that case we can learn from Prof. Mitchell that these facts need not be scamped by psychologists but can be made to take their place in a perfectly scientific account of the growth and structure of the mind, for they have their 'laws' like other psychological facts, and are capable of explanation and not merely of popular description. Thus Prof. Mitchell achieves in this chapter some remarks that are not commonplace even on topics so well-worn as that all our feelings must be necessarily selfish on the ground that 'since we do what pleases us, we must aim at our own pleasure, even when we think our care is for the pleasure of others' (p. 392). Again his account of the 'defect of intellectualism' in moral and æsthetic experience, and of the fatal 'sentimentalism' of the weak will, which 'may go not only with a knowledge of what is right, but with great emotion in the thought of ideals, deep sympathy with suffering, much resolving, and great remorse' (p. 397), strikes me as very excellent. And be it noted, that the description of the facts is never merely metaphorical, and the explanation always in terms of the fundamental conceptions which Prof. Mitchell had laid down in the earlier chapters. Similarly, the discussion of 'strength' of will (*e.g.* p. 399 ff.) is full of good things, such as the general principle that preference in actual conduct, not the comparison of pleasures and pains abstracted from their basis, is the measure of strength; that what we like best is determined not by violence of feeling, but by readiness to sacrifice other things for its realisation; that the will is weakened by letting the imagination habitually dwell on the unattainable. And who is not reminded of the ineffective idealist of Ibsen's 'Wild Duck' when he reads of the aspiration which turns to building castles in the air, so that 'There is more pleasure in achieving great deeds in idea than common things in reality' (p. 399). Nor could the thought that 'it is essential to an emotional life that a man should be taken out of himself in idea, just as it is essential to a practical life that he should be taken out of himself in reality' be more neatly expressed. Even on the 'freedom of the will' Prof. Mitchell has something to say that does not at once weary the reader by its familiarity: 'We are free against any of our likes, if we like to do something better, just as we are free against error and prejudice, if we know better. But the better liking, like the better knowledge, needs learning' (p. 403). I should like also in this connexion to direct attention to what the author has to say of the psychological conditions of morality (p. 285).

But I must resist the temptation to quote further—though it is itself but a testimony to the excellence of the book—in order to say something about the introductory chapters in which the foundations are laid for the subsequent account of the growth of the mind.

These chapters seem to me exceedingly important, both for the sake of the principles, and of the details of their analysis of experience. To justify this judgment I shall mention the author's discussion of three problems, *viz.* (1) the relation of mind and brain; (2) the 'direct explanation' of experience by reference to the 'occasion' on the one hand, and the 'structure' of the mind on the other, containing a re-introduction of the conception of 'faculties'; (3) the analysis of experience into subject-experience and object-experience, together with the conception of subject-experience as 'self-activity'.

(1) The problem of the relation of mind to brain is the problem of the 'indirect explanation,' *i.e.*, of the explanation of psychical events in terms of nervous structure and process. It is based on the assumption that 'whatever is possible to the mind, is possible to the brain' (p. 6). It presupposes all through the independent analysis and direct explanation of psychology, for we cannot inquire about the physical correlate of a certain feature of experience until we have determined its nature in psychological terms. The inference therefore is always *first* from the mind to the brain, and only when we have thus found the meaning of the nervous processes shall we be able to reverse the inference. Granted this assumption, the question is: Parallelism or Interaction? The author decides for Parallelism, *not however as a metaphysical doctrine* of an unknown reality manifesting itself simultaneously as consciousness and brain, but as a *mere working hypothesis*: 'except for clearness it does not make the least difference whether the assumption is right or wrong' (p. 7). Parallelism is to him mainly a protest against interaction, 'a hybrid process consisting partly of visible movements and partly of invisible feelings' (*ibid.*). Alike in the interests of physiology and psychology he assumes that a 'physical cause becomes a continuous physical effect which is broken at no point to become or receive a mental influence' (p. 6). And his ultimate reason for rejecting alike interaction and parallelism as a metaphysical doctrine is interesting, *viz.*, that both theories treat mind and brain as *co-ordinate*, overlooking that 'an abstraction is made [*viz.* from experiencing subjects] in the notion of physical events and things which is not made in the notion either of experience or of the mind' (p. 22).

I have gone into Prof. Mitchell's account of Parallelism at some length, because his adoption of it as a mere working-hypothesis is the most ingenious defence that could be made to meet the objections which are nowadays commonly brought against it. However strong these objections may be against *metaphysical* parallelism, we all know that a working-hypothesis need not be metaphysically true, and that its serviceableness for the purposes of science is the only thing we have to consider. It follows that the tendency in favour of interaction, which is undoubtedly on the increase among modern psychologists, can prevail only on the ground that interaction is the better scientific hypothesis. Now when it is sometimes said that interaction fits the facts of experience better, such as the

relation of stimulus and sensation, or the realisation of the will in external action, it is worth pointing out, that not only is the relation of sensation and stimulus not a 'fact' in the sense in which the realisation of the will is, but rather a scientific inference; and, secondly, that the question is not of the interaction (in some sense) of the mind with the body or the material universe, but of the interaction of mind and *brain or neural system*. And this interaction is certainly not a fact of experience but an inference from facts. And further, there is the complication that the two orders of interacting realities are not simultaneously accessible to the same observer; the one has only his experiences, but sees nothing of his neural processes or of their supposed action on his experiences; the other observes the neural processes, but can see nothing of their relation to a mind. Under these conditions, a division into a science of the neural facts, observable by sense and belonging to the common physical world, and another science of the psychical facts accessible to each observer primarily by introspection, seems to be the obvious division of labour demanded by the 'facts'. And this means Parallelism as a working-hypothesis.

On this basis, chapter xviii., the last in the book, carries the correlation of mind and brain into detail, so far as our present knowledge will permit. It points out that we may not assume a modification of experience for every modification of brain-process, for the brain has other functions in the life of the organism beside that of being the physical correlate of consciousness. On the other hand we must assume 'a brain-change for every change in experience' (p. 474), but without saying that the one is like the other (*e.g.*, that the sense of time mirrors the actual time taken by the corresponding brain process), or that to every detail which we can by analysis abstract in the mind, there must correspond a detail in the brain (*e.g.*, that every sensation is represented by a single specific cell). On the contrary, the correlation is rather between the brain *as a system*, and the mind *as a system* (p. 451). Hence it is an error to think that *e.g.* the correlate of our sense of the sameness of two things is that 'the same or similar parts of the cortex are excited'. In thus sweeping away much picturesque but false analogy, Prof. Mitchell shows himself familiar with the most up-to-date physiological teaching, as he does also in preferring the 'avalanche-view' of neural organisation to the 'army view,' *i.e.* to the theory that complex thoughts uniting many details must be represented by a pyramidal arrangement of neurones he prefers the view, held by McDougall and others, that higher levels are achieved by more complex *systems* of neurones. But into the details of the discussion of the neural correlates of thought, will, and emotion, we need not enter. Suffice it to say that Prof. Mitchell relies on the best authorities for his physiological facts and that he succeeds in compressing into a comparatively short space a vast amount of matter, ranging from the Neo-Müllerian law of specific energies

(p. 455) to a very excellent criticism of the theory that æsthetic interest is merely a complex of motor and organic sensations (p. 501).

(2) In contrast to the 'indirect explanation' of experience by means of the correlated neural processes, the 'direct explanation' uses only psychological factors, *viz.*, actual experiences and the 'structure' of the mind inferred from these. Prof. Mitchell starts (still in ch. i.) by regarding the mind as an individual growing thing: 'the mind is like a thing in respect of its individuality' (p. 16), this individuality he conceives neither as being due to an idle soul-substance, nor as a mere conglomerate of cohering experiences. Rather he finds it in the *structure* of the mind, which together with the occasion accounts for the occurrence and character of each experience. The structure has to be inferred from the experience and, except in so far as it is inherited, it is developed mainly in and by experience. 'If we say that the mind grows, it is because there is a growth in experience; and if we say there is a mind at all, it is because the nature of experience demands it' (p. 8). Again: 'the mind grows by its own working, and its way of working reveals its organisation' (p. 107).

This doctrine of the 'structure,' 'organisation' or 'faculties' of the mind seems to me to be one of the most important and valuable points in Prof. Mitchell's book. All mental action, in his view, is reaction on an occasion, developing that occasion. In sensation, the occasion is a physical stimulus, and only a physical explanation is possible in this case. But the sensation may itself become the occasion for higher developments, and with that we are within the province of psychology proper, and have to look for explanation to mental 'faculties' inherited or acquired.

But there are two kinds of 'faculties,' *viz.*, those that have at best only a descriptive or classificatory use, like the faculties of memory, will, reason, which are open to all the familiar objections against 'Faculty-psychology'. And, secondly, there are the faculties which we must assume for purposes, not of description, but of *explanation.* Such a faculty is a 'power to achieve experience by means that we do not experience' (p. 119), in other words, they are the mental conditions, other than the experience serving as 'occasion,' which must be assumed to account for the nature of our reaction to the occasion. Examples will best make clear what Prof. Mitchell means. Inherited faculties are *e.g.* 'our power of forming associations, and of forming habits of skill, thought, interest, conduct. For, in forming these, we are usually occupied with the present, and not with forming them; but, whether we wish it or not, our mind is thus forming itself at the same time in a manner that we can trace' (p. 119). And we have an example of an acquired faculty when we compare the working of the trained mind, achieving a result, *e.g.*, a calculation or a comparison, immediately and without effort, and the pains and troubles which the untrained mind has to reach the same result. A faculty in short is a kind of

skill, of which we can trace in experience alike the manner of its growing and of its working when fully grown. And the greater the number, development, and systematic connexion of such 'faculties,' in short, the more highly organised a 'mind' is, the more efficient it is in the three main modes of mental activity, *viz.*, thinking or knowing, feeling or taking an interest, willing or seeking. It will be seen that the 'faculties' of Prof. Mitchell are really nothing more than the 'dispositions' of other psychologists renamed. But we are rarely reminded that a disposition is after all nothing but a 'power to produce a certain experience' on occasion, and the term 'faculty' is valuable as insisting on this side of the matter, and bringing out the connexion of mental structure and mental function. And the whole doctrine of mental structure is valuable as disposing of the fiction of *unconscious* ideas and feelings.

(3) There remain to be mentioned a few points in Prof. Mitchell's 'Analysis of Experience' in chapters iii. and iv. I have just alluded to the fact that he accepts the traditional distinction of thinking, feeling, and willing, but I should like to add that he is careful to point out that these modes of activity, though separable by abstraction, are not separate in fact, and that every actual 'course of experience,' from the first instinctive movements in reaction to sensation to the most complex forms of conduct, thought, or æsthetic appreciation, contain all three kinds of activity, though generally one is dominant and gives its name to the whole experience. And the details of his analysis, especially of 'interest' (pp. 64-70) and volition (pp. 70-82) are excellent and deserve careful study. But the points to which I wish specially to draw attention, are (*a*) the analysis of *every* experience, whether cognitive, emotional or volitional, into an 'object-experience' and a 'subject-experience,' *i.e.* every experience is 'experience of an object by a self, and so of the attitude of a self towards an object' (p. 58), the attitude being felt, but not itself turned into an object. And (*b*) the view of this subject-experience, or attitude of the self to the object (whatever it may be, fact, imagination, general concept, law, etc.), as being always *experienced self-activity* (pp. 99 ff.). This is an interesting contribution to the vexed question of 'mental activity' in psychology. In effect, Prof. Mitchell distinguishes *three* uses of the word. First, we can speak of activity of the mind in the sense that every experience is due to the 'reaction' of the mind to a stimulus. But this activity is not experienced. We say that an experience is 'due' to it, from the point of view of psychological science, but it is not *felt as part* of the experience. Secondly, felt self-activity in the most general sense is common alike to thinking, feeling, willing, inasmuch as all three involve an attitude of the self towards, or an occupation with, the object. Thirdly, in a special sense, we apply activity to the volitional attitude, 'doing' as distinguished from feeling and thinking. Prof. Mitchell's distinctions certainly help to clear

the air, though they would perhaps have been more useful still if he had referred explicitly to some of the discussions in current literature, *e.g.* Mr. Bradley's article on the subject in MIND (N.S., 41).

If I have succeeded, by singling out these points, to give some idea of the wealth and interest of Prof. Mitchell's book, and thereby gaining for it fresh readers, the main purpose of this review will have been fulfilled. But I would like it to be clearly understood, that I have only picked a few good things at random, to whet the reader's appetite for more, and send him to study the book for himself. There are many important discussions which I have not had room to mention at all, *e.g.*, the excellent remarks on attention (*e.g.* p. 269), on 'taking for granted' (p. 254), and on the different senses of 'implicit' (p. 251). It is hard to think that any one can fail to read this book without profit.

But I have one serious complaint. There is no index, and there is no marginal analysis. In a book of 512 closely-printed pages, dealing with such a vast material, both are really indispensable to assist the reader in orientation. There is indeed an elaborate table of contents (pp. xi-xxxv), giving a detailed analysis of each chapter. But in the first place, it is most inconvenient to have to refer back to it as a help in following the argument (often very complicated) of a chapter. And, secondly, it does not help one to collect all the scattered passages in which the author refers to a given subject. A reader who wishes to put together *e.g.* the remarks on emotion, or attention, or volition, has to face a wearisome search through 500 pages for about half a dozen widely separated passages, without, or with only parsimonious, cross-references. In a second edition, I hope Prof. Mitchell will remedy this defect, which seriously impairs the practical usefulness of his book for students. And, in any case, to do all one can for the convenience of the reader is surely a part of the 'good manners' of authorship.

As regards criticism of the subject-matter, there are a number of points which I should like to discuss, but space does not permit. I will only refer shortly to two: (1) from the excellent chapters on 'Einfühlung,' I carry away the impression that Prof. Mitchell lays too much stress on the *generic* character of the 'Einfühlung,' and rather slurs over the specific differences which go with different objects, and different attitudes towards them. The 'Einfühlung' in specifically æsthetic perception, for instance, is, as Lipps's elaborate analysis has shown, a very different thing from the Einfühlung of ordinary perception; and the same applies to Einfühlung in relation to nature, and to fellow-men. Sameness there is, of course, but also difference, and Prof. Mitchell seems to me to dwell too much on the sameness, with the result that a student, not familiar with the subject, will carry away a somewhat lop-sided impression. And, now that we have got the psychology of Einfühlung, would it not be better to abandon the absurd and misleading term 'inner imitation' for sympathy and emotional response? The author's criticisms

of the term (p. 140) are admirable, but the term had better go altogether.

And (2) it is probably my fault, but I am left puzzled by the exact relation of the 'immanent' and the 'real' object of a thought (pp. 66 ff.). Perhaps, if Prof. Mitchell had made the distinction clear by showing its application to *judgment* (of which, throughout the book, he says exceedingly little), all difficulty would have been removed. I gather from one of the several passages on 'truth' (p. 228) that Prof. Mitchell rightly holds that all thought (including perception) is concerned with a 'single system of reality': 'there is true knowledge of the one real world at every level of thought'. In all thought, then, I take it, *what* we think is some real object —with varying degrees of truth, no doubt, but still a real object. And when we distinguish the object *as it is* (cp. 'object as real, or as having such and such a nature,' p. 65) from the object *as we think* it, the reference, I should say, is to more complete as against more imperfect knowledge, *e.g.*, to the object as it is for science compared with what it 'seems' from a particular point of perception. But Prof. Mitchell describes the 'immanent' object, as distinct from the real one, in just these terms, *viz.*, as 'object as we think it,' as '*what* we think' in distinction from the act of thinking (p. 61). But were we not told that what we think is the real object? There is here a verbal ambiguity, to say the least of it. Of course, one can see the distinction which Prof. Mitchell is driving at, *viz.*, the distinction between thought as judgment, or thought in its logical function, and thought as a psychological process. To distinguish an object as we think it and as it is, is to distinguish degrees of knowledge and truth; to distinguish real and immanent object is to distinguish thought in its function as judgment, from thought in abstraction from that function. Or, if this is not the distinction intended by Prof. Mitchell, we surely are left with the problem how much of the immanent object which we are said to think coincides with the real object which we are also said to think.

Possibly my difficulties are due to having misunderstood Prof. Mitchell's meaning, but even so I can plead that his language is inclined to be ambiguous and his exposition lacking in clearness.

As for 'Truth,' Prof. Mitchell must be called a Pragmatist. A particular belief no less than the whole system of knowledge is true only when 'it works' (p. 334). And this 'working' consists in 'economising trouble and risk by prophecy' about reality (p. 222). 'If the expectations are disappointed, the beliefs are thought to have been false; if they are realised, the beliefs are found to be true' (p. 229). These quotations will show the Pragmatic character of his views, which are stated, however, without any reference to the current controversies about truth, and without a criticism of other views. The absence of polemics is not to be deplored, but surely some of the objections to the Pragmatic view, with which Prof. Mitchell cannot be unfamiliar, were worth an answer?

R. F. Alfred Hoernlé.

The Development of Greek Philosophy. By the late Prof. R. Adamson. Edited by Prof. W. R. Sorley and Mr. R. P. Hardie. Edinburgh and London: Blackwood, 1908. Pp. x., 326.

The Editors of this volume say in their Preface: "The author did not live to write out any part of the book. But for many years he had been accustomed, as part of his university work, to lecture upon some period of Greek philosophy. He used few notes in lecturing, but he made constant reference to the text of the writers with whom he dealt; and he spoke so slowly that a rapid writer could take down almost every word. The material placed at the disposal of the editors has been preserved in this way; and they have endeavoured to present it to the reader in a form which does not obtrude its origin in the class-room. They are encouraged to believe that it is not an impossible task by the reception already given to the author's *Development of Modern Philosophy.*"

I should like to begin this Notice by saying that the Editors seem to me to have succeeded admirably in their presentment in book-form, of lectures which must have been singularly informing and stimulating to those who had the good fortune to hear them—lectures, on the one hand, spoken slowly by a remarkably clear and methodical thinker, and, on the other hand, demanding the constant co-operation of the hearers by way, not merely of 'taking notes,' but of perusing texts referred to at every step of the exposition. This is consequently a book which not only ought to "prove," as the Editors hope, "of value to students as an introduction to Greek Philosophy," but is also one from which lecturers on that, and indeed on any part of the History of Philosophy, may learn much concerning the method to be followed if their hearers are to be both informed and stimulated—a conjunction, I think, particularly difficult to effect in the case of lectures on the History of Philosophy, where the danger of 'cram' is always so great. It is not the least of the services rendered by Adamson to education that his lectures, as presented in this volume and its companion, illustrate so clearly for lecturers on Philosophy, especially on the History of Philosophy, the method by which this all-important conjunction may be effected.

Having said thus much about the general value of this volume, let me now refer to a few matters in it which seem to me to be of special interest. It covers so much ground—the whole of Early Greek Philosophy, Plato, Aristotle, the Stoics—that this is all that I can do within the limits of a Notice like the present.

I think that it is a very true, and a very important remark which is made on p. 77—that Plato's sense of a certain "deficiency in the Socratic ethics"—the failure of Socrates to answer the question, 'What is the Good?'—"lay at the foundation of much of the theory of Ideas". This being so, the Earliest Dialogues—the *Euthyphro, Crito, Charmides, Laches*—which it has been the

fashion to rule out of court as evidence for what Plato meant by his 'Ideas,' are seen to be of the first importance. Adamson does not make this development, but it is involved in the remark quoted.

The most important passage for Adamson's view of the Doctrine of Ideas is on pp. 110-113. The knowledge and hard thinking behind this short passage are, indeed, most remarkable: one sees behind it Plato's own account of the Doctrine of Ideas and the views—often contradictory—of the leading exponents of that account all clearly realized by the lecturer as material; and this material one sees him forthwith shaping into his own form with masterly ease. The impression, however, which the passage gives of Adamson's learning and ability is not, to my mind, incompatible with, at least qualified, dissent from his actual conclusion. His conclusion is that the earlier conception—that in the *Republic* and other Dialogues of the same period—of the relation between generated particular and 'Idea' as one between individual and class, particular and universal, many and one, is modified in the *Sophistes* and *Philebus*:—in the *Republic* "the Ideas are contemplated from the point of view of generalisation" and the interconnexion between them is "of the external kind which is dependent on the play of our thinking"; whereas, in the *Sophistes*, their interconnexion is determined by their intrinsic natures. This view of their interconnexion seems to Adamson to prepare the way "for excluding from the realm of real existence much that would have been included in it from the earlier point of view," and it is in the *Philebus* that he finds this result brought about, where, he holds, the αἰτία, not the πέρας or the μικτόν, is the realm of the 'Ideas'—that is, the 'Ideas' are causes of the imposition of quantitative definiteness upon the indefinite, and particulars, so far as they realise quantitative definiteness, obtain "a certain conformity to the Ideas, and therewith a certain share of existence." It is as quantitatively definite in this way, rather than as an individual belonging to a class, or a particular falling under a universal, that the sensible thing is related to its 'Idea'. Let me offer two remarks on this view. First: The difference noted by Adamson between the *Republic* and the *Sophist* seems to me to be sufficiently accounted for, without distinguishing an 'earlier' and a 'later' view, by the fact that in the *Republic* the 'Ideas' dwelt upon are notions or scientific points of view specially belonging to their respective departments of inquiry (*e.g. Justice*, *Bed*, etc.), whereas in the *Sophistes* they are the general notions or categories of thought (*Same*, *Different*, etc.) *employed* in all departments of inquiry, *i.e.*, wherever the 'Ideas' of special application are being *sought for*. The κοινωνία of these general categories happens to be the subject of the *Sophistes*, a subject which is not before Plato in the *Republic*. Secondly: I think that the αἰτία of the *Philebus* is not coextensive with the realm of the Ideas, but is simply the 'Idea of the Good'—the one rational cause which differentiates itself in the various 'Ideas,' which, as objects of

science—'laws of nature'—exhibit definite numerical ratios: they are not, indeed, simply these ratios—here I agree with Adamson—but it is as belonging to the μικτόν-class—here I agree with Prof. Henry Jackson—that they exhibit them. In the *Republic* the Good is ἐπέκεινα τῆς οὐσίας, therefore not an object to be scientifically determined; in the *Philebus* it is presented as capable of being so determined. But there is no inconsistency between these two positions; for the Good of the *Republic* is the αἰτία—the Universal Good; while in the *Philebus* we are mainly concerned with special manifestations, in the μικτόν-class, of the Universal Good. Prof. Jackson, indeed, places sensible particulars in the μικτόν-class along side of the 'Ideas' of 'natural kinds'—the παραδείγματα of these particulars; while Adamson restricts the contents of the μικτόν-class entirely to particulars—"the individuals in their imperfection," he says, "constitute the mixed class". I prefer to restrict the contents of the mixed class to the 'Ideas' other than the 'Idea of the Good'. Particulars of sense, I take it, have no place in the scheme ἄπειρον—πέρας—μικτόν—αἰτία. We have to do only with logical entities.

In the Aristotelian Philosophy Adamson finds a hiatus which runs through its psychology, epistemology and ontology: Νοῦς in man stands out of all relation to Ψυχῇ on the one hand, and to the Divine Νοῦς on the other hand, and the Divine Νοῦς—the Prime Mover, God—out of all relation to the world which is moved—"The Divine Mover is put beyond all conceivable connexion with the world of the concrete; and one can hardly regard as a sufficient explanation the reference to the striving of all things towards the Divine. From this striving it must also remain impossible to derive their characteristic natures. Thus it seems impossible to reconcile the unity and absoluteness of the Divine mind with the multiplicity and relativeness of even the intelligible essences of the world of generation. The two worlds still, as in Plato, fall apart without the possibility of rational connexion (p. 248)"—"No means of connexion is supplied between the pure unmixed energy (and, therefore, the continuous and systematic character of the intelligible) in the first cause, and the variety of forms embedded in matter in the world of generation. Such forms so far share the character of the original cause that they are eternal, uncreated. The causal energy transmitted to the world of generation is exercised not in producing such forms, but in effecting the constant variation of individuals. Neither, therefore, can the eternal forms find explanation in the supreme reason, nor is there furnished any ground of explanation for the other factor, the condition of all plurality, individuality, development—namely, matter. One is almost inclined to characterise the theory as a mistaken attempt to turn a purely abstract theorem into a concrete and apparently scientific explanation of facts (p. 226)."

Here, I venture to think, Adamson, with Zeller and others,

applies the standard of logic to that which, from its nature, does not admit, and is not regarded by Aristotle as admitting, the application of such a standard. Had Aristotle regarded his First Philosophy or Theology as a system against which logical objections such as those brought by Adamson were relevant, we may be sure that he would have presented it otherwise than he has done. How does he present it? In this form: 'God, as Final End of appetition and intellection, moves the universe and all that is therein, Himself unmoved'. That is all: to this dictum Aristotle's 'teleological account of the universe' is strictly limited. How, and why, God moves the universe just as He does move it, Aristotle does not attempt to determine. His 'teleology' here is certainly not 'scientific' (there is a 'scientific teleology' of which indeed he is the master), nor is it 'unscientific' like that of 'the Argument from Design,' but it is what may be called 'supra-scientific.' It appeals, not to the scientific understanding, but to that 'faith' which transcends and sustains the operations of the scientific understanding. Instead of deploring, with Zeller and Adamson, the lack of logic in Aristotle's First Philosophy, I consider it a great merit.

The lack of logic in the great logician's First Philosophy, together with here and there phrases disclosing high imagination and deep emotion, seems to me to determine, once for all, the true character of that Philosophy or Theology. It is not science. The Final End which its 'teleology' posits is one of which no 'constitutive' use may be made in science. But there are ends—subordinate ends under the Final End—of which a 'constitutive' use may rightly be made. Here we have what I alluded to above as that 'scientific teleology' of which Aristotle is the master—the method of biology. The method of biology, as Aristotle adumbrated it, and we now understand it, is to take each whole animal-or plant-organism (not of course *per se*, but in environment) as End, and from that Whole as End to work back to the explanation of its parts; then, from the parts so explained to return to the Whole, and revise one's original conception of it, repeating this double procedure till the given organism is seen clearly as a connected system. The advance which has been made in biology during the last fifty years has been mainly due to the consistent employment in detail of the 'teleological' method which Aristotle recognised as proper to the subject. Characters which were once regarded as merely 'accidental' or 'ornamental' are now shown to be *useful*—are explained in relation to the survival of the specific form, their End. But this is possible only where, as in biology, the 'Wholes' or 'Ends' are definite objects of observation, and the 'parts' or 'means' are capable of being clearly and distinctly seen as parts of, or means to, their respective Wholes or Ends. Here we have 'scientific teleology,' and logic rules. But the universe is not a 'Whole,' nor is God an 'End,' to be thus made object of scientific observation. If we bring in logic to explain 'parts' or 'means,' in relation to such a 'Whole'

or 'End,' our 'teleology' is 'unscientific'. The only 'teleology' which is admissible is that which I have ventured to call 'supra-scientific' and to vindicate for Aristotle. As logician and biologist he viewed nature as a great system of specific forms or εἴδη, each one sharply defined, each one a morphological whole, or organism, repaying much careful examination of its parts, as parts of that definite whole: and his 'teleology' as *scientific* method, does not go beyond the relations of the parts of each εἶδος to that εἶδος itself as whole: if he attempts to group the various εἴδη into one κόσμος, that κόσμος is regarded by him as End for a supra-scientific, not for a scientific teleology. It was perhaps fortunate, when we consider the state of knowledge in Aristotle's day, that he held so firmly to the view that biological species, or εἴδη, are *fixed*. Had he, with his insufficient knowledge and means of investigation, believed that species are not fixed, but fluid, he would doubtless have been tempted into the path of speculation regarding their *future*; he would have been tempted to make some form not yet achieved, rather than the existing form, the end from which to derive his teleological explanations. Fortunately all the evidence available was in favour of fixed species of plants and animals. To social forms, on the other hand, he did apply the conception of evolution; and shows a tendency to read the future into the past. His conception of πόλις as goal of social development rather overshadows him when he investigates the Family, and causes him to see the history of the domestic relation of master and slave in a wrong light. I think, therefore, that Adamson's criticism of the fixity of specific forms in the Aristotelian system does not hit the mark (see passage from p. 226 quoted above). Aristotle, I take it, as naturalist, simply did not speculate about the *origin* of species; and, further, although regarding them as fixed, he did not regard them as fixed in the static sense, but as dynamic agencies (specific manifestations of the one force communicated to the universe by the Prime Mover) always operating in the same way—ἄνθρωπος, ἄνθρωπον γεννᾷ.

On page 260 the following remarkable *obiter dictum* stands in a footnote: "Carneades, by far the acutest mind in antiquity—a regular Hume". One regrets much that Adamson did not indicate the reasons he had for this judgment on a philosopher whose significance has been strangely overlooked. I have myself long held the view which Adamson expresses in this note; and I think that I understand what his reasons for it must have been. At any rate, if they were at all like mine, they were pretty much the following: Carneades relieved (or rather, if he had 'caught on,' would have relieved) Platonism of an incubus which the Academy had put upon it—the incubus of the Doctrine of a World of Realities cut off from a World of *Sensibilia* which are not Realities at all. Plato himself, in his Dialogues throughout, and doubtless in his oral teaching, protested against the separation of

the two Worlds ; but his disciples found it more conducive to ' philosophical discussion ' to maintain it—' philosophical discussion ' they preferred to ' research ' as prosecuted by the Peripatetics and the Stoics—the latter, as Adamson points out (p. 258), largely influenced by the former. The natural result of ' philosophical discussion ' preferred to ' research ' was the ' scepticism ' which eventually captured the Academy. The world of sensible phenomena, it was urged, is unmeaning unless it can be seen to resemble, or reveal in some way, the World of Real Substances. But how can it be seen to do this ? These Real Substances are incomprehensible and their so-called sensible manifestations are consequently unmeaning. Now Carneades opened up this *impasse* of Academic scepticism by substituting for the ' category ' of *substance* that of *nexus*. His position was thus very like that taken up by Berkeley. Instead of the insoluble problem of making out the conformity of our impressions—*πάθη* or *φαντασίαι* with real substances—*πράγματα*, their causes, we have the soluble one of ascertaining the ways in which, as a matter of fact, our impressions are connected with one another—for our impressions " hang together like the links of a chain," *οὐδέποτε φαντασία μονοειδὴς ὑφίσταται ἀλλ' ἀλύσεως τρόπον ἄλλη ἐξ ἄλλης ἤρτηται* (*Sext. Emp.*, vii., 166). The nexus of impressions or phenomena is the true reality—not a static reality hidden behind them (whether that static reality be figured as Eternal Idea or as Material Substratum makes no difference), but a dynamic reality penetrating them, and, moreover (our present-day ' Pragmatists ' may take note of this anticipation of their doctrine), a reality to be defined *in relation to the conduct of life and to happiness*—*πρός τε τὴν τοῦ βίου διαγωγὴν καὶ τὴν τῆς εὐδαιμονίας περίκτησιν* (*Sext. Emp.*, vii., 166). It is in this form that Carneades reinstates, or tries to reinstate, in the teaching of the Academy, the doctrine, at once epistemological and ethical, of the primacy of the Good which Plato found it so difficult to get his pupils and other critics to grasp. Carneades was indeed, as Adamson says, " a regular Hume "—but unfortunately Ancient Philosophy produced no Kant to follow and develop its Hume.

J. A. Stewart.

The Philosophy of Loyalty. By Josiah Royce, Professor of the History of Philosophy in Harvard University. New York : The Macmillan Co., 1908. Pp. xii, 409.

It is somewhat equivocal praise of a brilliant writer to say of his book that it " gives new names to old ways of thinking ". In this latest work of Prof. Royce's there is much to invite such a verdict. His task—that of presenting an ethical doctrine at once philosophically sound and practically applicable, within the limits of eight popular lectures—was indeed both a fresh and a bold one. And, we may say at once, from the " homiletic " point of view the enterprise

succeeds. No reader of the type the Author means to address is likely to lay down the book without feeling that it has cast some light on the actual problems of life and duty. But to the philosophical section of his audience, Prof. Royce's "way of thinking" will not be new. His solution of the ethical problem is just what, in this country at least, would be understood as the ordinary idealistic solution. He claims indeed that the moral end is to be "loyal". But the fundamental assertion on which he bases the claim is the characteristic doctrine of idealism. Through Loyalty alone will a man be able to realise his own rational will in a good which yet transcends his private individuality. "If you want to know what is good for you," he says in Chapter I., "bring your own will to self-consciousness, . . . this is a first principle, of all ethical inquiry"; but yet "I can never find what my own will is by merely brooding over my natural desires"; and the solution of this paradox —the realisation of my true will—can only lie "in some happy union between the inner and the outer, between my social world and myself". This happy union is what takes place wherever mere social conformity turns into exactly what in these lectures the Author calls "Loyalty".

Yet old and familiar as Prof. Royce's real standpoint is, his work is more than an idle shuffling of terms. The new form given to the old truth at once charges it with fresh power. It enables the philosopher to preach. It enables him to put to his reader, in a single, definite, terse statement, an applicable doctrine of the chief end of man. "*In Loyalty,*" he prints in italics, "*when Loyalty is properly defined, lies the fulfilment of the whole moral Law.*" The simplicity of the conception transforms the philosophic doctrine into a kind of message. "Loyalty" is something men know—something, therefore, that they can be called to. There is more than a renaming, there is a genuine rejuvenation of idea in Prof. Royce's presentation of the idealistic doctrine of the moral end.

Now, to catch a popular word like this and proceed to find in it all the law and the prophets might have been quite a cheap and easy process. It is the characteristic device of the woolly-headed preacher everywhere. The danger to a thinker is that a term so serviceable as a moral rallying-cry may need some torturing before it can be taken to express the philosophic truth. It is the triumph of Prof. Royce's popular lecturing, however, that he can be faithful to his term. He has brought forward a conception—Loyalty, or "the willing and practical and thoroughgoing devotion of a person to a cause"—which, simple as it is, not only expresses the underlying idealistic truth that the moral end is the common good, but seems—at first sight at least—to meet the familiar difficulties which surround that doctrine in a remarkably adequate way.

For what is—at first sight—the standing difficulty of idealistic ethics in connexion with its theory of a common good? Is it not simply that of ensuring the double condition, first, that the good

shall be really good, and, secondly, that it shall be really common? The difficulty with "Duty," *e.g.*, is that it is common without being clearly the doer's good; with "Self-realisation," that it may be good, but is not so obviously common. Now "Loyalty" seems to have the necessary double front. It is "common"—in at least this simple and obvious sense, that common people are capable of it. "It is no aristocratic gift of the few." It is a good, if good it be at all, equally open to the humblest and the highest. On the other hand, that Loyalty *is* a good, "viewed merely as a personal attitude" and "quite apart from all question as to its object," is the burden of three of the Author's most convincing chapters. By giving the individual a cause to which he can commit himself, Loyalty reconciles him to himself—gives him at once a will of his own and a field for its expression. Objections to Loyalty come mostly from the side of individualism, but they all presuppose the thing they object to. True it is that, in past history, the blind loyalty of men has been the food on which oppression and tyranny have thriven, but the alternative—freedom—is itself a cause which calls for loyalty. Narrow loyalties—to class honour and the like—may lead to conduct eccentric, preposterous and unjust; but when such action is condemned, it is condemned in the name of loyalty to some wider cause. Of the claim most characteristic of individualism—and echoed in so much of our modern literature—that we should before all things be autonomous individuals, the same is to be said. So far as its form goes we admit the demand. Autonomy is morally essential. "Only your own will brought to a knowledge of itself an determine for you what your duty is." But individualism errs by seeking it in the wrong place. Neither in personal pleasure, nor in personal might, nor in personal serenity of soul can that being be truly autonomous whose very nature is social, and who therefore craves for an extra-personal and super-personal to which he can be "freely loyal".

Loyalty, then, is an accessible good to all and a supreme good to each; and so far, Prof. Royce's conception is promising. But here it threatens to fall foul of the requirements of a real theory of the moral end. Is this which is said to be "accessible to all" really one good? Are all the actual loyalties of men genuine examples of one thing, or are they a mere collection of things utterly diverse, united only by the thin identity of a specious name? There are facts which seem to favour the latter view. Causes conflict. Loyalty to a clan at feud, for instance, or to a civilised nation in a state of war-fever directs all its force towards the death of the enemy's loyalty to his clan or nation. Loyalties seem to differ, indeed—and mortally. We assume that Loyalty is one when we call it the one supreme good. If so, we must call it self-destructive. And a self-destructive supreme good is simply supreme evil.

What is at stake is the identity of Loyalty; and Prof. Royce saves it by pointing out that its self-destructive character is accidental.

The essential fact is that Loyalty is self-generating and self-supporting. Within the unity of a common cause its appearance in one member strengthens and promotes its manifestation in another. "Brother strengthens brother." This essentially unifying character of Loyalty makes an adjustment conceivable whereby all causes shall subserve one universal cause. To the crucial question, what shall be the universal aim? under what universal idea shall the adjustment be realised? the answer is at hand in the conception of Loyalty itself. If the loyalty of A is a supreme good for him and that of B a supreme good for him, the collision of the two means ultimate waste of good. Make it the ultimate aim, then, to prevent such collision. Make the promotion of Loyalty in all other men the ultimate cause, and in all your loyalty be loyal to that.

It would be petty criticism to dwell here on the fact that there is a circle involved—to object that the maxim "be loyal to Loyalty" could always be confronted by the question "loyal to loyalty to what?" After all, there must be a circle somewhere in human affairs, and in ethics if the circle be but big enough it is all that can fairly be demanded. That it is so in Prof. Royce's case is shown by the finely illuminating discussion in the central chapters of his book where he turns the light of his principle upon practical problems—problems of the individual conscience, of modern American social life, and of education.

A more serious criticism, however, lies just behind. Is this one good which is accessible to all, the same thing as that Loyalty which is said to be the good of each? or rather, has the Author shown it to be so? On the surface, he has not. His argument seems to be simply: "Loyalty is a good, hence the more of it the better; promote, therefore, the maximum of loyalty; choose your private cause with a view to that". The argument seems dangerously near to Mill's famous *ignoratio elenchi*, "each person's loyalty is a good to that person, the loyalty of all therefore a good to the aggregate of all persons". Yet, though the Author has not raised this difficulty explicitly we venture to think he has implicitly met it, and in doing so, has met it in the only way compatible with the character of his book.

What is wanted is some proof that maximum loyalty in others is supreme good to that particular private being who finds his own good in his own loyalty. Now, it hardly needs to be proved that the virtues are loyalty. Further, it has been proved by Prof. Royce—it is a thesis central to his whole position—that the virtues are loyalty *to loyalty;* and that the way to be virtuous in highest degree—the way to define our duties and find our moral path in the most effective way—is to follow the maxim "be loyal to Loyalty". These two statements together, provided both are sound, seem to make the point. The more loyal I am to loyalty the more virtuous I become, for thereby I find my moral path better: which means, the more loyal I am to Loyalty, the more loyal I become as an individual,

for to be virtuous is to be loyal. In other words: in proportion as I give myself away to the service of the universal good, in that proportion do I reap the "Loyalty," which is my individual good. Explicitly, Prof. Royce's popular statement has not gone further than to say that in Loyalty I *both* get *and* give good. His argument required more. It required that I get *in proportion as* I give. But his data really yield that conclusion, provided the latter of the two premises is right; that is, provided his principle furnishes the key to moral perplexity which he supposes it to furnish. This final question could only be answered by a critical examination, longer than can be undertaken here, of the cases to which Prof. Royce thinks his principle can be applied with success. It is important to note, however, that the issue all turns on the applicability of the principle—on the simple question whether the maxim "be loyal to loyalty" is good practical advice or no. In concentrating on this question the Author was giving the only "proof" of the idealistic conception of the moral end compatible with the popular character of his undertaking—ultimately, perhaps, the only proof it is possible to give.

Despite his able defence, throughout the first six chapters of his book, of the view that Loyalty contains all the private good that the individual can really want, the reader still feels that something more is needed before the ghost of individualism has been laid. Is it certain, after all, that the giving of oneself away in loyalty to a cause never means loss—that it never means curtailment of freedom or of power, or of any genuine individual good? These questions seem to demand some sort of religious philosophy to support the ethical structure. This is what the Author in the last two lectures tries to furnish. And his endeavour leads him into direct conflict with certain recent metaphysical tendencies represented pre-eminently by his friend and colleague Prof. James.

Prof. Royce would not come into conflict with Pragmatism unless it implied a truth for him. That the truth is no insignificant one becomes apparent from his problem. If Loyalty is to be the ultimate good, then loyalty to a cause however poor must never be sheer lost labour. Where are the grounds for such a belief? The Author finds them in the fact that there is one cause to serve which is to be ultimately successful, namely, Truth; and in the further fact implied therein, that all service, in so far as it is directed to a cause which is true, is similarly successful. And all causes have some truth. Now in order to see how Truth can be regarded as a cause at all, we must recall just such facts as Modern Pragmatism has brought into prominence. Truth, it has insisted, is an active attitude. There is no mere theoretic truth. The search for truth is an active seeking for practical congruity between our principles, and our attained empirical results. Principles are true if they "succeed" and they succeed if they are true. All this is a necessary part of Prof. Royce's own position. It remains for him only to

push the last statement further, and ask what "success" means. To this he answers that success, in the sense in which truth is success, is not a merely private subjective experience. Neither is it any possible number of such experiences on the part of one individual or any number of individuals. "Success," in this application, is only where that state of facts towards which the individual's mind is directed—that which in the moments of his insight and devotion he becomes—is in itself verily and permanently real. This conception of an ultimately real, all-inclusive individual experience—the reality of that rational common spirit which appears wherever men try to think truly or serve loyally—is what the Author calls the "Eternal World". From it he derives his final definition of Loyalty. "Loyalty is the will to manifest, so far as is possible, the Eternal, that is, the conscious and superhuman unity of life, in the form of the acts of an individual self." This conception closes the system. In the universal Life the ultimate success of our loyal life is assured, for in it all our finitude and imperfection is completed.

Without these closing chapters the claim of Loyalty would not be stated in its most convincing form. The Author's metaphysic is no mere addendum to his Ethics. Until a philosophy of religion has shown where every imperfect effort comes to rest in "a conspectus of life which includes all temporal happenings and strivings in a single consciousness and fulfils all our actual purposes together and is all we seek to be," the fulness of the *good* of Loyalty is not disclosed. It is here, perhaps, that, to many readers, the greatest difficulties of the book will be found. It does not seem satisfying that even "in the end" our failures should cost us nothing—that a miraculous forgiveness should wipe out all error at a stroke and put saint and sinner together—and in the final "conspectus of life" such seems to be the result. If, in the Eternal, all our fragmentary efforts are to be caught up and fulfilled, where are we to find any ultimate distinction of result between the good among them and the bad? Still, it is perhaps hardly a blemish in a popular book, that it abstain from offering a solution of the problem of evil, if only it do not put obviously insurmountable barriers in the way of any possible solution. This reflection has the greater applicability to a writer who has worked out a theory of the evil will elsewhere, in view of which his present position is adopted. In seeking the missing distinction, it must not be overlooked that the will which finds ultimate fulfilment is "the will to manifest the Eternal". The will to thwart an Eternal which necessarily prevails—or any other will in so far as it cherishes this evil aim—must of necessity find its undoing.

The most serious difficulties, however, are likely to be found in that attempted union of voluntarism and realism—that mutual involution of will, thought and reality—which the conception of the eternal itself means to express. It is comparatively easy, with Pragmatism, to invest reality with the "dynamic" of living thought and purpose if we are willing to sacrifice everything to that. It is a different matter

to try, as Prof. Royce does, to invest thought and purpose at the same time with the objectivity of reality. Yet the significance of the book as a statement of the idealistic view of life for a popular audience would seem to lie not a little in the fact that it has dared to put forward such a conception. There has been almost too much militant idealism in the air of recent years. For some reason, it has not rung sound. The very eagerness with which Pragmatic writers hasten to defend their claim to *make* our moral and religious postulates true, has tended to cast suspicion on their truth. There has been a lack of true philosophic humility, an absence of patient logic, an unseemly proneness on the part of many who deal with the ultimate nature of reality and life to report things not as they are but as they and we want to see them. Despite speculative difficulties, it will do something to restore the confidence of the educated mind in the spiritual view of the world, to meet for once a "recent idealist" who claims no subjective right over the reality he interprets, but dares avow from the outset that he believes in the Eternal and is in quest of it. Moreover, the very fact that his metaphysical speculations are so capable as they are of yielding the ethical system and the penetrating criticism of life which he has extracted from them, is itself no mean indication that the inherent difficulties they contain may in the end prove surmountable.

J. W. Scott.

Geschichte der Griechischen Ethik. Max Wundt, Erster Band, *Die Entstehung der Griechischen Ethik.* Leipzig: Engelmann, 1908. Pp. ix, 535.

The present instalment of Dr. Wundt's learned and careful work brings the history of Greek ethical ideas down to Plato; the second volume, which is to complete the book, and to deal particularly with the influence of Hellenistic ethics on the development of Christianity, should be warmly welcomed, if the author fulfils in it the expectations which his treatment of the rise of ethical science arouses. Dr. Wundt's general position may be summed up briefly by saying that he sees in Greek ethics the result of a fusion between the Ionian and the Attic character. Ionia contributes the element of restless intellectual curiosity and determination to comprehend the facts of human life as a rational system, Attica, as might be expected from the more settled agrarian character of its inhabitants, that of moral backbone and religious earnestness. There is a great deal that is attractive in this analysis, and probably no one will doubt that the contrast upon which the author lays such stress does exhibit itself on a comparison of Ionic with Attic literature, though one may be permitted to doubt, at least until we know more than we do at present of the racial antecedents of the people of Attica, how far the explanation is really to be found in an ethnological difference.

With respect to particular points, I would specially commend the

chapters on the Attic drama, and the account of the "Sophists"; it was an excellent thought to call special attention to the connexion of almost all the prominent figures of the sophistic movement with Ionia or Ionian colonies. I am not so clear about the satisfactoriness of the author's treatment of "Homer" as a characteristically Ionian product. It is at least rash to infer, *e.g.*, that the absence of pictures of home life from the *Iliad* shows that the "restless Ionian spirit" was indifferent to the attractions of home and native land. After all the *Iliad* does not profess to give an account of the every-day life of the society it describes; its characters are all placed in unusual surroundings; they are "on the war-path," and we cannot infer much from their behaviour as to the kind of existence they would lead in more normal conditions. Besides, if they do not indulge in rhapsodies about "home," they are all, at least, represented as sick of war, and only anxious to have done with it. "A good return home" is the first thing which a person peculiarly anxious to win their favour thinks of wishing them. Dr. Wundt, indeed, describes them as only living for war, and actually calling it by a name which means "*Wonne*," but surely this etymology of χάρμη, which is at variance with the spirit of every epithet ever applied in the poem to the works of war, must be a false one. So I doubt very gravely whether φιλοπτόλεμος is really a eulogistic term in the *Iliad*. In one of the two passages cited by Dr. Wundt it is used by Hector about the besieging Achæans, and is thus more likely than not to be the reverse of a compliment, in the other, where it is applied by Achilles to the Myrmidones, it need not be complimentary. Nor does "Homer" really say, as Dr. Wundt makes him say, that "war is dearer than home": what he says is that on a special occasion Athene miraculously made it seem so to the Achæan host. The whole point of the passage lies in the monstrosity of the delusion. It is a curious omission that nothing should be said about the two striking ethical ideas of αἰδὼς and νέμεσις, and it is at least doubtful whether the author is right in assuming that the famous cycles of tragic stories about "Thebes and Pelops' line" were unknown to the Homeric poets. When one considers the very primitive character of the conception of the "curse" of Œdipus on his sons, in the *Septem* of Æschylus, or of the part taken by the ghost of Clytæmnestra in the pursuit of Orestes, does it not seem more likely that those stories were deliberately ignored by the epic poets than that they should not have been invented until the seventh century?

I doubt again whether the author has any real justification for his insistence upon the "aristocratic" character of the early Attic moral ideal, as illustrated by Herodotus' story of Tellus. There is nothing in the text of Herodotus to show that Tellus was either particularly rich or well-born, and the dramatic effect of Solon's praises of him to Crœsus rather suffers if we suppose that he was either.

I suspect that the connexion asserted to exist between Pythagoreanism and aristocratic sympathies is equally fanciful, though I know that most historians agree on the point with Dr. Wundt. Still, the best-accredited account of the persecution of the Pythagoreans in South Italy (an account which appears to go back to Aristoxenus), expressly ascribes the persecuting movement to "the nobles," and Empedocles, whose general ethical and religious activity cannot be severed from the wider Orphic-Pythagorean movement, was notoriously a fanatic for democracy. There are also some unfortunate omissions in the treatment of Pythagoreanism. Something ought to have been said of the famous doctrine of the "three lives," which almost certainly goes back to Pythagoras himself, and has left so deep a mark on the *Republic* and *Ethics*. On the other hand, it is pretty certainly a mistake to credit the early Pythagoreans with the conception of the soul as the ἁρμονία of the body, which we know to have been current among the Pythagorean friends of Socrates and Plato. The whole theory really depends on the medical doctrines of Alcmæon, which, by the way, are ignored by Dr. Wundt, though they are demonstrably the source of the Platonic (and Aristotelian) theory of the "mean," and of Plato's psychology of pleasure. Dr. Wundt, in fact, has been unable to do anything like justice to the part played by the Italian thinkers in the history of ethics, because he unfortunately shares the popular prejudice against the historical accuracy of Plato's account of the relation of Socrates to contemporary thinkers. A consequence of this prejudice is that there are certain grave omissions in the interesting section devoted to Socrates himself. Dr. Wundt is rightly sceptical about the historical value of Xenophon's reminiscences, but he has not seen that Plato, in the *Phædo* and elsewhere, provides us with a fairly detailed account of Socrates' spiritual history, which can be confirmed on almost every point by the satiric portrait of Aristophanes. It is our wilful neglect of this testimony which has made Socrates, what Dr. Wundt calls him, one of the least understood figures of history. If we will only believe what Plato has to tell us about the influence on Socrates of Archelaus and Diogenes, and the book of Anaxagoras, and his close relations with the Pythagorean communities of Thebes and Phlius, most of our difficulties about him will be found to disappear. We shall understand, *e.g.*, why Aristophanes represents him in the *Clouds* as a mathematician (a character which even Xenophon is unable to deny to him), and in the *Birds* as a necromancer. Dr. Wundt himself affords a good example of the way in which "having eyes we see not" when Socrates is concerned in his remarks about the famous story of the oracle given to Chærephon at Delphi. The oracle, he says, is represented as being at once the consequence and the cause of Socrates' philosophic career, and the contradiction shows that, though the giving of the oracle must be a fact, the account in the *Apology* of the circumstances under which it was

given cannot be historical. But the supposed difficulty does not really exist at all, and the result which follows from examining the statement of Plato is most instructive. What Plato's story presupposes is that, while it was the oracle which led Socrates to devote himself to his missionary career, of which his position among the inquiring νέοι was a consequence, Socrates was previously well known as a "wit" in the more restricted philosophical circles — apparently connected with Pythagoreanism — to which Chærephon belonged. Now since in the *Charmides* and *Symposium* Socrates is represented as enjoying his peculiar reputation with the νέοι as early as the beginning of the Peloponnesian war, or even earlier (as it is made to go back at least to the earliest boyhood of Alcibiades, who was of military age when the war began), it follows that Plato must think of the famous oracle as belonging to a date not much later, at the outside, than 440, when Socrates would be a man of thirty. His first reputation as a σοφὸς must therefore have been established by that time, a result which also follows from any careful study of the *Protagoras*. Hence the statements of the *Phædo* and *Parmenides* about his early interest in philosophy must be absolutely correct, and the whole current notion of him, defended by Dr. Wundt, as a person who knew only as much about the older Greek speculation as could be picked up in general conversation, must be dismissed as a pure blunder. In particular the way is opened for a perception of the all-important truth that it is largely through Socrates that the ethical side of the Pythagoreanism taught by Philolaus and his friends found its way into the works of Plato. It also becomes necessary to correct Dr. Wundt, and with him the generality of German students on a still more important point. We no longer have the right to assert, in the very teeth of Plato's most explicit representations, that the doctrine of εἴδη was invented by Plato, and consequently that *e.g.* the *Phædo* must be unhistorical. Dr. Wundt, like others before him, appeals for this view to the authority of Aristotle. But it should be noted that Aristotle nowhere says that Plato originated the doctrine of εἴδη. The persons whom he twice contrasts with Socrates, on the ground that they first treated universals as χωριστά, are always referred to vaguely in the plural, and in one all-important passage (*Metaphysics*, *M.* 1078 *b* 7 ff.), seem actually to be distinguished from Plato. At least, the identification of "those who first said that there are εἴδη" with Plato, and Plato alone, is never explicitly made in the Aristotelian text, but is due to the interpreters. Still it may, of course, be said that at least Aristotle denies that Socrates was one of the believers in the εἴδη, but even so, it does not seem to me, that a statement of Aristotle about a predecessor who had left no written statement of his views, and who had been dead for a generation and more before Aristotle's connexion with the Academy began ought to outweigh the very positive declaration of Plato. In fact, if, as I believe, it is demonstrable, not

only as Prof. Burnet has shown, from the *Phædo*, but also from the *Sophistes* and *Parmenides*, that the doctrine of εἴδη was already current in Socratic and Pythagorean circles before the death of Socrates, it can hardly be doubted that Socrates himself had a large share in its development. Whence I should infer that the *Phædo* is probably in the main a faithful reproduction of the conversation of the actual Socrates. I may add that I believe the same to be demonstrable of the *Symposium*, and to be probably much truer than is ordinarily supposed of the *Republic*. It is, at least, significant that no unmistakable traces of the very definite philosophy which Aristotle ascribes to Plato can be found in the dialogues until we come to the *Philebus* and *Timæus*. This seems to me to prove that "Platonism" really was, in fact, the product of Plato's old age. I am sorry to see that Dr. Wundt refuses to allow any share in the formation of the theory of εἴδη to Euclides, and assumes that the εἰδῶν φίλοι of the *Sophistes* represent Plato himself and his scholars. Dr. Wundt calls this result "zweifellos"; to me it appears demonstrable that the persons meant are neither Plato nor any of his followers, and a process of exclusions leaves us with no one except Euclides as the philosopher whom Plato has in mind. It is further only this interpretation which explains why the criticisms of the *Sophistes* should be ascribed to a visitor from Elea.

I have little to add with reference to the author's treatment of Plato, except that the combinations upon which he depends for his chronological arrangement of the dialogues seem to me largely unsatisfactory. With Raeder I find it hard to believe that the *Gorgias* can have been written before the foundation of the Academy, to which it seems to contain one quite definite allusion, and quite impossible to place the *Phædrus* before the *Republic*. I think, too, that the Orphic and mystical side of Plato's philosophy is dwelt on far too much, and the logical and mathematical element too little.

And, finally, I can see no reason to suppose that Plato's intervention in Syracusan politics was, or was thought by the philosopher himself to be, a failure. As Prof. Burnet has recently reminded us, it at least made him the recognised supreme authority on constitutional problems for the Hellenic world.

A. E. Taylor.

Early Greek Philosophy. By John Burnet, M.A., LL.D., Professor of Greek in the United College of St. Salvator and St. Leonard, St. Andrews. 2nd Edition. London: Adam & Charles Black, 1908. Pp. x., 433.

The first edition of this book, written when its author was very young, was received with welcome by readers who desired to see the early Greek philosophic theories presented objectively, by a sound scholar competently trained in philosophy, and not without

the equipment of scientific knowledge also needed for the appreciation of these theories. It is unnecessary to say that the more Mr. Burnet's book was read the more it won upon the confidence of such readers, and we are glad that he has had the satisfaction of seeing a second edition called for, and an opportunity thereby given him of publishing his reasonings and conclusions modified in the light of his maturer judgment, and of discoveries (*e.g.*, of portions of the Ἰατρικά of Menon) made since his first edition appeared.

No book ever written can absolve the critical scholar from the duty of consulting the original documents from time to time; but for one person interested in ancient philosophy who can do this safely there are a hundred who cannot; and the larger class of persons may consider it fortunate that they have an interpreter like Mr. Burnet to help them, and are not compelled to depend on interpretations of the only sort known to their grandfathers, from the times of Hegel to those of G. H. Lewes.

Mr. Burnet has the great initial merit of taking the Greeks seriously and making his readers take them so—not merely because their philosophic results have an absolute value, but because philosophic methods are always valuable and interesting even apart from results. It is a matter of intense interest, even from the view of the anthropologist, to observe the old Hellenic thinkers proceeding, each in his own way, to deal with philosophic problems which confront us still, and on some of which we are as far from having reached abiding results as they were. The records of the operations of human intelligence dealing with such problems in the past are a necessary propædeutic for their future treatment. As regards transcendental questions, the points on which we have any advantage over the Ancient Hellenes are few and scarcely essential. Our philosophy has not taught us either how to drop these problems, or how to solve them. Our scientific knowledge—our knowledge of nature—is, it is true, immensely advanced beyond theirs; but no one requires to be told how little aid is to be derived from science for the solution, or even the true apprehension, of transcendental questions. The Hellenes were attracted by these questions, just as we are; their interests in living and dying were like ours; they have left incontestable proofs of their intellectual power in all the departments of work which admit of elenchus; and therefore it is reasonable (as Mr. Burnet makes one feel) to endeavour patiently to place oneself at their point of view, if not in the hope of seeing light, at least with the assurance of interesting and pleasant companionship along the dark ways of philosophic speculation.

There is another feature of Mr. Burnet's work which commends it to us favourably, namely, his steady avoidance where possible of the stale terminology of which our ears have grown tired. The constant use of such terms as 'hylozoism,' for instance, is deadening to all interest. Readers want to know first of all what these terms mean, and a writer who persistently uses them without ade-

quate explanation sooner or later excites the just suspicion of not understanding them himself. But what explanation of them ever was or could be adequate? Mr. Burnet uses the plainest terms he can. To be plain in such matters is no easy task. It is hard to divest oneself of the jargon of the Schools, mediæval and modern, which is so often a cloak for barrenness of ideas. Only a clear and independent thinker can safely venture to write on philosophic subjects in the language of ordinary people; but it is something to be thankful for when we find one who does so. Mr. Burnet has taken pains to choose the words and forms of expression which convey their meaning most directly, and thereby spared his readers a great deal of trouble. A corollary of the adoption of this method of expression is that, when he comes upon something which he does not understand, he says so, and leaves no doubt in any one's mind either of his sincerity or of his perspicacity.

He aims at presenting the ancient theories in their inter-relationship. His constructive work, however, is not a baseless fabric. He has the imagination without which history cannot be written, but all his structures rest upon reasoned grounds. They can be accounted for. He is free from that comfortable temperament—that εὐγνωμοσύνη—to which any given theory may become a sort of πανσπερμία, and be found to contain "in germ" all other theories. He pays due regard to decisive points of differentiation as well as of affinity between the views of different philosophers. Early Greek systems of Philosophy, if they do not form an organic whole, have at least a certain articulation *inter se;* they are not, at all events, a mere congeries. They seem to exhibit themselves to Mr. Burnet as a partially woven web, with different patterns in its different parts; and he shows—often with admirable acumen—how the successive or contemporary weavers modelled or modified their designs according to the patterns thus set by their fellows. He endeavours to show us this fabric at every angle of vision; to describe for us the history of its parts, and to explain how far the weavers of the various pieces were influenced one by the work of another.

Such seems to be the scope of his book, and it is one with which, we think, even Momus could not quarrel. We cannot here examine the work in detail. We will, however, add some more or less desultory observations which occurred to us in the pleasant task of reading through it once more.

The introduction announces and illustrates the principles which pervade the whole. It is written in the rapid, brilliant manner characteristic of a writer who has thoroughly digested the subject which he is to develop.

In his account of the Ionic philosophers Mr. Burnet chooses the term 'Boundless' as the best English equivalent for Anaximander's τὸ ἄπειρον, which he regards as spatially, not qualitatively, infinite. He assigns cogent reasons for so regarding it (pp. 60 n, and 77).

He makes some valuable remarks (p. 74) on the use of the word θεός by the early philosophers, to designate their primary substance, without any of the ordinary theological implications. This has also its modern analogues, *e.g.*, in Spinoza's use of 'deus,' and is interesting in many ways. The accounts which he gives of the 'Arithmetic,' Geometry and harmonics of Pythagoras, and afterwards of "The Pythagoreans," are eminently satisfactory. His attempt to rationalise the theory that "things are numbers" is extremely good.

His chapters on the Eleatics are fresh and vigorous. He endeavours to dispel the notion that Xenophanes wrote a philosophic poem (p. 128) and he explains well the meaning of Xenophanes' monotheism. Xenophanes "was really Goethe's *weltkind*, with prophets to right and left of him; and he would have smiled if he had known that one day he was to be regarded as a theologian" (p. 142). Mr. Burnet's account of Parmenides, too (pp. 198, 204, 212), is good, though the theory he adopts as to the philosophy of Parmenides may well have fluttered the dovecotes of idealism.

We like very much his account of the relation of Atomism to Eleaticism.

We are favourably impressed also with his explanation of the term ὑγος as used by Heraclitus (p. 152). He is convincing when he argues against the belief that Heraclitus himself held the doctrine of ἐκπύρωσις (p. 178).

His firm grasp of the connexion between the development of medical studies and that of philosophy, after a certain stage in the latter had been reached, is highly satisfactory. This connexion is rooted in the nature of the two subjects. The deep human interest of the one leads back or forward inevitably to the other. The questions of the origin, changes, and destiny of the individual life—the physiology and pathology, so to speak, of the microcosm—connect themselves with those of the macrocosm, and this not merely on speculative, but also on practical grounds. Scientific medicine, indeed, profited by an extended knowledge of nature, and we have the striking testimony of Aristotle (436^{a} 19—^{b}1) to the historical fact of the relation between the development of philosophy and that of medical science.

Mr. Burnet regards Empedocles as a genuine poet. Perhaps it is for this reason that, when he comes to translate the fragments of Empedocles, his style rises, as it does, to a high pitch of excellence.

Besides his account (already referred to) of the relationship of the atomism of Leucippus to the teaching of the Eleatics—especially of Parmenides—there are many other points in his treatment of atomism which commend themselves as sound. Among these is his discussion of the question whether βάρος was for Democritus a primary quality of each atom *per se*, out of relation to the δίνη. Atios asserts that βάρος was added to the list of atomic primary

qualities by Epicurus; while Aristotle, on the other hand, seems to imply that Democritus had already included it among these qualities. We have read this discussion with special interest, nor do we see how to add anything of consequence to the data for arriving at a decision put before us by Mr. Burnet, or to quarrel with his conclusion, when he makes *βάρος* a secondary quality, due to the vortex-notion of the atoms in the *δίνη*. This was probably the view of the old Atomists themselves.

We do not wish to spoil the picture of a thoroughly good—and even great—book by petty criticisms, but perhaps we should mention that on page 298 the judgment—"Schaubach (*An. Claz. Fragm.*, p. 57) fabricated a work entitled *τὸ πρὸς Λεχίνεον* out of the pseudo-Aristotelian *de Plantis*, 817ª 27"—seems unduly hard on this painstaking commentator, whose actual words, on the page referred to, are—"Quaeritur, num hoc loco libellus ab Anaxagora conscriptus intelligi debeat, necne? Expectaverim *ἐν τῷ πρὸς Λεχίνεον*. De Lechineo isto nihil aliunde nobis constat, quantum equidem scio." Here Schaubach (though no doubt ignorant of the history of our Greek text of the *de Plantis*), instead of 'fabricating' such a work appears to be incredulous as to its existence, and to warn his reader, against believing in it.

We conclude by wishing that Mr. Burnet's *Early Greek Philosophy* included Democritus. Plato, of course, falls outside its scope, and besides would require a large treatise to himself; but we cannot help thinking, and may be allowed to say here, that a full and objective treatment of Plato, on Mr. Burnet's favourite lines, by one who possesses his peculiarly fresh and full knowledge of Plato, would be valuable to philosophers and scholars.

John I. Beare.

VII.—NEW BOOKS.

Neurasthenia. By Gilbert Ballet, Professeur agrégé à la Faculté de Médicine de Paris. Translated from the Third French Edition by P. Campbell Smith, M.D. London: Kimpton & Co., 1908. Pp. xxviii, 408. Price 6s.

This volume is an excellent general exposition of Neurasthenia. It has all the usual lucidity of French medical works, and the translation is well done. The translator contributes a valuable introduction. He distinguishes Neurasthenia Minor from Neurasthenia Major, the latter being the subject of this volume. Neurasthenia Minor is marked by chronic fatigue of perception, memory, will and the nervous system generally; vaso-motor instability; defective metabolism, resulting in auto-intoxications, and in various diseases, *e.g.*, nephritis; abnormalities of internal secretions (probably) as shown, *e.g.*, in the likeness between neurasthenia and exophthalmic goitre, in the tendency to alcoholism, which may be due, according to Dr. Harry Campbell, "to insufficiency of an internal secretion of a stimulating nature"; often, if not always, some diminution of sexual power; slight bodily malformations. All these point to "degeneration". Dr. Smith holds that Neurasthenia Minor is a distinguishable clinical entity. The person is "born tired," and things never go well with him. The name is serviceable to describe a definite condition of hereditary weakness; but we are far from understanding the possible positive ante-natal causes, toxic or other, and it is not necessary to assume that this state of chronic fatigue or feebleness of the nervous system is really an inheritable "variation" rather than a "modification" produced *in utero*.

Neurasthenia Major "may be defined as a group of symptoms due to chronic fatigue with (perhaps one should rather say 'including') defective metabolism and vaso-motor irregularity, which may be produced *de novo* by cares, prolonged intoxications, various drains upon the system, certain strong emotions; by certain forms of trauma"—*e.g.*, railway accidents—"but which results much oftener from the action of one of these influences on a degenerate constitution that has shown some degree of chronic fatigue from infancy" (p. xviii.).

The word 'degenerate' must be taken with the precaution that it need not imply a really degenerate stock, but may be due to ante-natal perversion by toxines, or injury, or perverted nutrition of the mother. The natural history of undeveloped organs, like the thyroid or supra-renal secretions, is still full of conjecture and mythology, and, therefore, it is premature to call even Neurasthenia Minor a degenerate state in a strict sense. The definition given of Neurasthenia Major indicates admirably the scope and standpoint of this book. The fundamental symptoms of Neurasthenia are: a persistent headache of a special character, insomnia, muscular asthenia, rachialgia, a peculiar mental state, and, lastly, dyspepsia, due to gastro-intestinal atony (p. 3).

Neurasthenia is an exhaustion disease, so differing from the neuroses, particularly hysteria, "in which the disorders are more especially psychic in nature, and depend on the fixation in the mind of certain images, or, in the current phrase, of suggestions" (p. 3).

Part i. deals with definitions, etc. Part ii. has chapters on general causes, special causes—heredity and education, exciting causes—such as over-brain-pressure, school over-pressure, which affects young children hardly at all, but adolescence considerably, moral over-pressure, muscular over-pressure, intoxications, above all, the abuse of alcohol and tobacco, and the use of morphine and cocaine (p. 31), various infective diseases, for example, typhoid fever, scarlet fever, malaria; traumatisms; dyspepsia; genital disorders, uterine affections.

Part iii. deals with the clinical forms of Neurasthenia and the leading stigmata, which are carefully discussed. The chief mental symptoms are a conscious weakening of the personality, aboulia, shown by "interminable hesitations; nothing is more distressing to them than to come to a decision; it is often on the enfeeblement of the will that the motor-asthenia depends, still more than on a special debility of the muscles" (p. 70).

"The memory is also affected, owing to enfeebled attention. The amnesia of neurasthenics is indiscriminate. Their emotionalism is extreme; everything impresses them, and every emotion is especially distressing to them, because they perceive with unusual vividness the diverse sensations produced in the different systems—heart, respiratory system, intestines—by all emotional states" (p. 71). "Hence timidity, fear, easy fatigue, hypochondriasis, and the many phobias—agoraphobia, claustrophobia, or fear of narrow and closed spaces; antropophobia, or fear of crowds: stasophobia, or fear of the upright position" (p. 74).

"The condition is made worse by incessantly renewed inquiries as to their state of health and the recommendations that are showered on them by their friends" (p. 74).

There are many secondary symptoms, of which the chief are the disorders of common sensation of the vaso-motor innervation, angina pectoris (functional, not organic). There may be disturbances of eyesight and the other senses as well as of the genito-urinary organs.

Prof. Ballet distinguishes four types of Neurasthenia—cerebro spinal, including cerebro-asthenia and myelasthenia; neurasthenia of women; genital neurasthenia; traumatic neurasthenia. Unlike P. Janet, he would prefer to reserve the term "psychasthenic" "to denote the mental fatigue and the inability for brain work of simple neurasthenics."

Part iv. contains a good summary of the theories of the causes of exhaustion. None of the theories—gastric auto-intoxication, dyspeptic vitiation of nutrition, the genital theory, the vaso-motor theory—is quite satisfactory. "These theories leave totally unaffected the conception that is most generally held to-day, namely, that nervous exhaustion has its source in a modification of all the nerve centres" (p. 135).

The real nature of this exhaustion we do not know. "Neurasthenia is not a disease due to autosuggestion, like hysteria, or at least it is only secondarily so: it is, above all, a disorder of the energy" (p. 140).

Part v. deals with prophylactic measures, which include physical, mental and moral education.

Part vi. deals with treatment, which includes psycho-therapy among the most important. This part maintains a clear distinction between indirect psycho-therapy, or the psychic influences of the different hygienic measures utilised in the different treatment of neurasthenia, and direct psycho-therapy, which includes three distinct methods,—hypnotic suggestion, suggestion in the waking state, moral guidance by means of reasoning (p. 192).

The processes described as "suggestion of the waking state" resemble closely those named by Dr. Boris Sidis as "hypnoid". The patient lies down in a comfortable position, shuts the eyes, thinks of sleep, until he feels a certain torpor supervening. He then gives himself suitable suggestions, and then opens his eyes. This is the method recommended by Lévy. Dr. Sidis, however, who has studied this condition carefully, shows that it is not entirely a state of "waking" consciousness, but a definable transition state, which may pass either into sleep or into the hypnotic state proper; and he has found that free-play of the phantasy and the effort to recall the origins of any illness or accident leading to the fixed idea or depressed state frequently results in dissipation of the obsession. Ballet rather uses the state as opening the patient's mind to the doctor's suggestions.

There is a very careful chapter of 100 pages on diet. The remainder of the book is occupied by Hydro-therapeutics, exercise in gymnastics, and the special application of the Weir-Mitchell system, particularly in women. There is an index (subject and author) of forty pages. It would be difficult to name any volume that gives a better general view of this baffling, yet important, psycho-physical condition.

W. L. M.

The Metaphysics of Nature. By Carveth Read, M.A., Grote Professor of Philosophy in the University of London. Second Edition, with Appendices. London: Adam & Charles Black, 1908. Pp. xiii, 372.[1]

It is a pleasure to record this early appearance of a Second Edition of Prof. Read's ably and often finely written work. Those who are as yet unacquainted with it should become so now that they have the advantage of reading the valuable Appendices on Truth, Consciousness, Transcendent Being, and Moral Freedom in which the author strives, by formulating his position more clearly, to defend his doctrines against published criticisms. The present writer is exceedingly grateful for Prof. Read's very thorough attempt to remove his objections. If, in spite of all that he has done for me, I remain guilty of perplexity, Prof. Read will remember that he has himself said that his conception of Being is such that "no words can meet the difficulty of expressing its relation to Consciousness" (p. 211). When I have been trying to grasp the relation of Personal Consciousness, Generic Consciousness and the Continuum of Consciousness to one another, and to Being and to the Activity of Manifestation which is the concomitant or correlative of the Changes of Being, I have felt the force of his remark. It is easy to follow what Prof. Read says about the "Universality of Consciousness,"—his amusing discovery that he was a *Pampsychist* rather reminds one of M. Jourdain—but exceedingly difficult, for me at least, to avoid thinking that he has at times confused the World *of* Consciousness with the World *in* Consciousness. When he says that Consciousness as "the totality of experience or awareness in the World" may accompany all Being, he is talking of the former; when he says that "the World in Consciousness develops at the same rate as consciousness develops in the World" he is talking of the latter, and the ambiguity of the word World may be the reason why he transfers the difficulties of the one to the other. Thus it is quite clear that, as Prof. Read says, the World *in* Consciousness is a product of social intercourse. It is not identical with, or fully equivalent to the World *of* Consciousness which we may believe,

[1] For Critical Notice of First Edition, see Mind, N.S., 60, p. 554.

with Prof. Read, reaches like, and with, Being, far beyond our ken. That the World *in* Consciousness is another to Consciousness, leaves it doubtful whether Prof. Read has any right to deny that consciousness may be actually the entire Being of the World *of* Consciousness. That consciousness in this wider sense of world ever develops is a doubtful and fantastic speculation, which belongs to the dangerous side of *Pampsychism* to which Prof. Read refers. But if he is in for the game he must play it, and admit the possibility that since his World *in* Consciousness, the world which is the work of his "Generic Consciousness" without which Being would not constitute an actual world, the world of space and time and the categories is *not* his World *of* Consciousness, it may, after all, be our way of cognising what is veritably a Conscious World, that, for example, the Solar System may have an organised consciousness corresponding to, and perhaps identical with, its immense complexity of organisation as a Being. To come down to Prof. Reid's wisely restricted speculations: his Generic Consciousness seems to me somewhat of a myth, and it seems to me again ambiguous to say that without it "Being would not constitute an actual World". All we can say is that certain conscious beings might not. Again, Prof. Read is very much afraid that the consciousness in which there is an "actual world" should be mistaken for phenomenal. I think that fear well grounded. He proposes "to regard personal consciousness as a function, or activity, or (as it might be best to say) the actuality of that Being of which the Body is the phenomenon". But Prof. Read's effort "to preserve the 'subject' and its transcendent significance" along with a belief in Being that is more than anything that can be expressed in consciousness results in throwing most weight on the material fact. "A man's body," he says, "expresses his character as much as his mind, and even more than his apperception; for it is the phenomenon of his whole Being, including that which is only subconscious, but which influences the apperceptive mind in innumerable ways, though rarely or never rising into apperception." This seems to make human consciousness a partial appearance of that Being which is completely *manifested* in the body, and reduces our "knowing" to something that *appears* in experience *i.e.* in consciousness. One word in connexion with the Appendix on Moral Freedom. Prof. Read insists on Cosmological Necessity. Now if the Cosmos goes on its own way, and man's illusion of personal freedom is merely his way of recognising the fact that his action is the outcome of his character, and that is the outcome of antecedent causes, so that he does right or wrong by Cosmological Necessity, why does the Cosmos bother us to keep advising one another that we ought to do this and avoid that? Why does Prof. Read, for example, conclude this Appendix by saying that the recognition of Cosmological Necessity must lead us to turn to the control of the causes of character? By education, by social reform, by breeding and by elimination, human nature must, he says, be regenerated. I believe and grant all this. To put it crudely, I see that human freedom must admit and employ natural necessity, but it can only do it if it is in some way that is not an illusion superior to it. All that Prof. Read urges presupposes that we can exert ourselves to induce people to recognise certain things: that there is a vital matter in our hands. What is the good of talk like this if all goes by process of cosmological necessity? or is this the way by which cosmological necessity works? If so, it seems to me a wearisome and stupid device.

DAVID MORRISON.

Mental Pathology in its Relation to Normal Psychology. A Course of Lectures delivered in the University of Leipzig, by GUSTAV STÖRRING, Dr. Phil. et Med., now Professor of Philosophy in the University of Zurich. Translated by Thomas Loveday, M.A. Swan Sonnenschein & Co., 1907. Pp. x, 298. Price 10s. 6d.

The general aim and plan of this book are excellent. It describes and illustrates with well-selected cases the principal types of mental derangement, and discusses their bearing upon the problems of general psychology. It is written, not for the medical man or specialist in mental diseases, but for all students of psychology; and it is written by a professor of philosophy who has had considerable experience as a medical specialist for nervous and mental diseases. We have no other book that brings together so conveniently for the student of normal psychology the principal results attained by mental pathology, and Mr. Loveday's excellent translation will fill a serious gap in his bookshelf. The book consists of a series of twenty-five lectures, which treat successively of hallucinations and illusions, aphasia, amnesia, anomalies of self-consciousness, imperative ideas and insane delusions, imbecility, abnormalities of feeling and of volition.

Prof. Störring's discussions of these conditions are everywhere clear, interesting, and admirably concise, and are illustrated with well-selected cases, which might perhaps have been made more numerous with advantage to the lay reader. His theory of hallucination seems to be more acceptable than any of the well-known theories which he criticises; but it needs to be supplemented on the physiological side, which is left very obscure in these lectures; for like so many others who have attempted theories of hallucination, Prof. Störring has neglected to furnish the prime requisite of any completely satisfactory theory, namely a clear definition of the neural conditions or concomitants of the peculiarities that distinguish the representation from the perception of an object.

A feature of the book which will be widely regarded as a serious defect is its polemic against the conception of unconscious or subconscious mental process, both in the form of unconscious links in normal mental process and in the form of independent or collateral processes. The author recognises the "phenomena of double consciousness" in the sense of alternating trains of memory and would explain them as the effects of "alteration in the *concausæ* of reproduction," especially alterations of the organic sensations. But the facts which are widely accepted as evidence of unconscious links in normal mental process are regarded as explicable by "the hypothesis of dimly-conscious psychical states"; while the evidence for the reality of the doubling of the stream of mental process and for the occurrence of co-consciousness is simply ignored. Now, although the occurrence of co-consciousness must always remain incapable of actual demonstration, no unprejudiced person familiar with the facts of post-hypnotic suggestion and of automatisms in general, with the studies of divided personality which have been published in recent years in France and America, and with the work of the Society for Psychical Research, could deny the occurrence in some cases of a collateral or concurrent stream of mental process which manifests itself in the intelligent control of bodily movement and yet remains altogether outside of and independent of the stream of normal consciousness. Caution in the interpretation of the facts of this strange and puzzling order, is commendable; but Prof. Störring, together with a large number of his fellow-psychologists in Germany, seems to go beyond commendable caution and to lay himself open to the charge of ignoring a large group of facts, the interpretation of which constitutes the most fascinating and perhaps the

most important problem of present-day psychology. It is only fair to note that since the date of publication of the German original of this book, the facts in question have been considerably added to, notably by the publications of Dr. Morton Prince and his colleagues. Prof. Störring seems to be aware of only one of the various hypotheses suggested for the explanation of these facts, namely the hypothesis of a second-self or secondary-consciousness, conceived as an enduring feature of the normal mind. But the rejection of this, perhaps the least acceptable of the hypotheses advanced for the explanation of the facts, by no means justifies the ignoring, or the denial, of the facts themselves.

The principal feature of the later lectures is the insistence on the leading part played by "affective conditions" in the production of a variety of abnormal states, especially of those the leading feature of which is the dominance of a fixed idea. All this is welcome as a contribution from the side of mental pathology to the protest against intellectualism in psychology; but its value is somewhat diminished by the author's attribution of all the potency of affective-emotive processes to the organic sensations involved in them and to "increase in the flow of blood to the brain" (p. 284); for he thus seems to take away with one hand what he has given with the other.

Other points of special interest are Prof. Störring's application of the principle of inhibition by drainage (p. 263) to the explanation of the fixation of "ideas" and of the restriction of the field of consciousness; and his conception of "summation-centres of feelings". This last seems to be essentially similar to Mr. Shand's conception of a sentiment, the importance of which has been urged elsewhere by the present writer.

W. McD.

Principles of Logic. By George Hayward Joyce, S.J. London: Longmans, Green & Co., 1908. Pp. xx, 429.

As a text-book for the students who are likely to use it this book has many strong points. It is neither the bald summary of logical doctrines so frequently forming the content of primers, nor is it a metaphysical treatise with a logical title. The main outlines of the subject are sketched in concise paragraphs in which headings and definitions are printed in heavy type. But the print is attractive and the reading pleasant. Supplementary paragraphs and sections containing extended discussions of important topics are printed in still smaller type and these are dispersed throughout the book. But even here the print is still attractive.

The work is, in addition, thoroughly up to date and shows that the author is well-versed in the most modern theories as well as in the writings of those whom too many post-Renaissance logicians neglected. The writer has the good fortune to feel confident that he can base his logical doctrines on a satisfactory metaphysical system, *viz.*, scholasticism. These metaphysical deductions, not spun out to undue length, form the matter of many of the supplementary paragraphs, and the difficulty caused to the student by the introduction of abstruse questions is fully compensated by the satisfaction he will find in the coherency of the whole.

The partisans of scholastic logic, of whom Prof. Joyce is one, are naturally reinvigorated by the revival of interest in the Aristotelian writings, the ultimate source of their own doctrine. The neo-scholastics are fully entitled to claim the support of the Neo-Aristotelians in all matters in which the schoolmen reproduce the spirit of their teacher.

Prof. Joyce, giving liberal quotations, dwells upon the accord between him and his mediæval interpreters. But he seems to ignore the fact that there is a profound difference between the finality, the roundedness, and and the compactness of Thomism and Aristotle's own cautious and often cryptic utterances on questions of ultimate import. The *Posterior Analytics* and the *Metaphysics* may be a fountain-head to which we are always willing to return, while Thomism, though deriving from that source, may be a stream long since stagnant or perishing in the desert. If Scholasticism is such a wholly satisfactory philosophy, its adherents have still to show how it comes about that modern science and modern logic have been formed by a breach with that philosophy.

But the author will doubtless be much applauded by his friends for producing a work which is both serviceable, erudite and orthodox. He is entitled to make as much as he can out of the reflexion he quotes, in his introduction, from Prof. Case, as to the backwardness of the Reformed Churches in elaborating any philosophic basis for their faith. But this and one or two other references in the book betray a little of the *odium theologicum*. In a work in which the dogmatic spirit, though carefully held in leash, is always ready to spring out, it is only too natural that there should be an occasional hasty assumption or inconsistency summarily disregarded. Thus it is said on page 188 that 'the Dictum is an immediate deduction from the principle of Contradiction'. Hegel is classed as a conceptualist on page 132. Induction is said not to be ratiocinative and yet we hear of the 'evidence' for our induction. The whole treatment of the uniformity of nature and of causality is rather thin in spite of its learning. The possibility of 'interference' with the laws of nature is discussed without careful definition of what 'interference' would imply. I have verified some of the references and found them accurate with the exception of the substitution of An. *Post.* for An. *Prior*. II., c. 23, on page 229.

G. R. T. Ross.

Proceedings of the Aristotelian Society. New Series, vol. viii. Containing the papers read before the Society during the Twenty-ninth Session, 1907-1908. London: Williams & Norgate, 1908. Pp. 268.

The present volume fully maintains the interest and value that have attached to preceding issues. So much good material, with such diversity of topic and standpoint, is not easy to find. Mr. R. B. Haldane, the President of the Society for the single year, opens the Proceedings with an address on 'The Methods of Modern Logic and the Conception of Infinity'; the purpose of which is to show the confusions which result from assuming quantity to possess a merely discrete character, and neglecting the continuous aspect which gives true or qualitative infinity. It concludes with a succinct statement of the doctrine of absolute idealism. This is followed by a paper on 'Purpose' by Prof. R. Latta, who argues that, just as every purpose implies an end, so an end always implies a purpose. Wherever there is system there is function and therefore end; but equally, wherever there is system there is purpose. Only, the more system so much the more purpose. Accordingly, since there is purpose throughout nature, there is (contrary to pragmatist assumption) purpose without self-consciousness and without selection between contingent or indeterminate alternatives. In a lengthy discussion of 'Prof. James's "Pragmatism"' Mr. G. E. Moore contends that the main propositions of the pragmatist theory of truth (*e.g.*, All useful beliefs are true, All truths are made true by those who believe them) would be true if asserted

about *most* or *some*, but are false when asserted about *all*. Utility is not the only, nor the universal, property of true beliefs; and true beliefs are made true by those who believe them, only to the extent that they themselves make corresponding alterations in existence. The discussion is acute and clear—the reader must be left to judge how far it gets to the heart of the problem. Next comes 'The Religious Sentiment: An Inductive Enquiry,' by Prof. A. Caldecott. "This is a study of a small group of thirty-four autobiographies of Wesley's early Methodist Preachers." The religious sentiment appears from these cases to consist of a dominant or central emotion organising all other emotions and mental elements into a system under its control. The religious emotion proper manifests itself especially in a joyfulness which is indicative of efficiency and mental health. Dealing with 'The Ideal of Totality' Mr. S. H. Hodgson points out the ambiguity of the term according as we mean a whole of merely conceptual or a whole of perceptual content. The former implies limitation and finitude, the latter infinity. Our experience involves that the universe is infinite, but its infinity precludes explanation of it. We know that it is being or power which is the infinite and eternal object of infinite and eternal consciousness as subject, but we have no more positive idea of this concrete whole. Mr. Hodgson remarks, at the outset of his paper, on the agreement and disagreement that exist between it and Mr. Haldane's. The reader will find it highly suggestive to take the two together. In a paper entitled 'Impressions and Ideas—The Problem of Idealism,' Mr. H. Wildon Carr expounds a scepticism that follows the lines of Hume, and accepts this as 'a final and definite philosophical position' which yet 'leaves the practical issues of life unaffected'. In the course of his exposition he subjects to criticism the philosophy of Mr. Hodgson, and of Mr. Moore, as well as idealism and pragmatism. The next contribution is by Mr. T. Percy Nunn, 'On the Concept of Epistemological Levels'. Premising that logic as the study of the methods of science cannot advance without considering 'the process of acquirement of knowledge as it takes place under definite psychological conditions,' he proceeds to investigate these conditions and to apply the result to characterise the stages in the development of science—their character depending on the relation subsisting between the cognitive, the conative, and the affective aspects of the process. This is an instructive piece of work. Prof. G. Dawes Hicks treats of 'The Relation of Subject and Object from the Point of View of Psychological Development'. Starting from the position that psychology and epistemology are inseparable, he goes on to show (1) that the relation in question is not psychologically ultimate; (2) that cognition is not derivative from feeling. Proceeding regressively, by eliminating factors that are evidently not primordial, he concludes that an elementary experience consists of an 'obscure and confused awareness of sense qualities, barely and imperfectly discriminated, and not apprehended as belonging either to an independent world of fact or to the modes of the subject's inner life'; and contends (1) that such sensory elements are at no stage of experience psychical in character; (2) that there is no generic distinction between the so-called immediate apprehension of a sense quality and the apprehension of it when interpreted or mediated by thought. The Proceedings close with a symposium in which Profs. S. Alexander, J. Ward, C. Read, and G. F. Stout explain 'The Nature of Mental Activity,' and defend their several interpretations against adverse positions. The discussion, which it is rather difficult to summarise, will be found throughout very interesting and suggestive.

Neo-Platonism in Relation to Christianity. By CHARLES ELSEE. Cambridge University Press, 1908. Pp. xii, 144. 2s. 6d.

Mr. Elsee's essay, which gained the Hulsean Prize at Cambridge in 1901, gives a lively and on the whole sympathetic sketch of the history of Neo-Platonism and its influence upon the Christian Fathers, but I cannot feel that the writer has justified his assertion that the school had, from its inception, the deliberate purpose of defending a reformed Hellenism against the inroads of the new religion. For one thing, Mr. Elsee is forced by his thesis to date the revival of religious seriousness in the Pagan world far too late, when he ascribes it to "the period between Lucian and Plotinus". He himself on occasion quotes Plutarch, and surely must know of the existence of such writers as Apuleius, Maximus of Tyre, Dion Chrysostom, Aristides, none of whom fall within the limits he assigns. It is a pity that he seems to be unacquainted with Dr. Dill's *Roman Society from Nero to the Antonines*, which would have put him right on this important point. Nor do I think that he has successfully shown the existence of traces of Christian influence in the *Enneads*. He refers, *e.g.*, to the "beatific vision," as the source of the doctrine of ecstacy, but the "beatific vision" itself is purely Platonic, and comes from the *Phædrus*, where it seems to be, in turn, borrowed from the Orphics. To overcome the objection created by the absolute silence of Plotinus Mr. Elsee institutes a comparison with the *Life* of Apollonius of Tyana, and argues that Plotinus ignores Christianity precisely because he wishes to supersede it. But the parallel is really an unfortunate one. The *Life* of Apollonius reveals knowledge of the gospel story on almost every page, and the spirit of propagandism which is its chief feature is entirely absent from the *Enneads*. They are a contribution to speculation, not a gospel. Nor is it to the point to urge that Plotinus, who wrote against the gnostics, cannot have been indifferent towards orthodox Catholicism. The orthodox did not directly impugn any fundamental Platonic doctrine, as the gnostics did by their pessimistic doctrine "that the κόσμος is evil". Porphyry, again, seems to have attacked Christianity much more in the character of a "higher critic" than in the name of Platonic philosophy, and to questions of criticism Plotinus was always indifferent. So again, it is an error to see a loan from Christianity in the Neo-Platonist conception of "likeness to God" as the end of life: the thought and language are strictly Platonic, and go back through Plato to the Orphic conception of the soul as a fallen divinity, and the Dionysiac theory of the identity of the "Bacchus" with the God whom he serves. Is not the real explanation of the resemblances between Christianity and Neo-Platonism simply that both are saturated with words and ideas which go back to Orphicism and cognate religious movements? Thus, *e.g.*, the very words of the Apocalyptic song, "Worthy is the lamb," seem to be an echo of the old chants in honour of the ἄξιος ταῦρος by whose blood, shed before the foundation of the world, the "Bacchus" believed himself to be redeemed. When the first Christian artists depicted Jesus with the lyre of Orpheus their presentation contained more truth than perhaps they dreamed of.

A. E. TAYLOR.

The Origin of the Sense of Beauty: Some Suggestions upon the Source and Development of the Æsthetic Feelings. By FELIX CLAY, B.A., Architect. London: Smith, Elder & Co., 1908. Pp. xviii, 302. 6s. net.

In this book, as the result of much reading and a good deal of reflexion, we have some judicious observations on Æsthetics in general and a

rather abortive attempt to trace our artistic likes and dislikes to instinctive preferences originally necessary for survival, and to exhibit their rudimentary form among the activities of the lower animals. The instinctive pleasure in harmony springs, according to Mr. Clay, from the impelling need for suitability to environment. It is thus an instinct for conformity with nature, and is directly dependent upon the connexion between the conditions of nature and the functions of organs. Art thus springs from the needs of life, and "is the interpretation of environment by helping towards harmonious adjustment" (p. 281). There may be such innate emotions as pleasure which is a necessary corollary of consciousness and the power of choice (p. 76); as a diffuse feeling of general pleasure from the direct sensuous appeal to the eye or ear (p. 107); as an "instinct for conformity with environment" (p. 138), etc.; and they may be, or come to be, all one with the purely æsthetic emotion we recognise ourselves as experiencing: Art very probably does possess some biological significance; also, to go at length into "the growth and origin of the instinctive desires" in order to "conjecture how the mere vital necessity of conformity with environment may be conceived to lead to the curious aptitude with which man's heart goes out, as it were, to nature" may be the clear purpose of Mr. Clay's book, may be a satisfactory explanation of our pleasure in *Art*, and may have been successfully executed, only I do not think so. Much of his time is taken up with perfectly gratuitous and rather elementary psychologising, and it may be said that the author never really gets down to his task, or succeeds in performing it satisfactorily. Although many of man's practical satisfactions may hitch themselves on to his æsthetic feeling, they do not constitute its whole essence; the ethical judgment of value is potent now in the pseudo-æsthetic factors alone. That it was ever more potent in æsthetic emotion is assumed here, not demonstrated; and, even with the aid of this assumption little else is established. Much that Mr. Clay says is sane and excellent criticism, *e.g.*, his chapter on "Meaning and Expression".

D. M.

Utopian Papers, Being Addresses to "The Utopians". By Prof. Patrick Geddes, S. H. Swinny, Dr. J. W. Slaughter, V. V. Branford, Dr. Lionel Taylor, Sister Nivedita, F. W. Felkin and Rev. Joseph Wood. Edited by Dorothea Hollins. London: Masters & Co., 1908. Pp. xi, 208.

This book may be taken as an expression of Evolutionary Idealism and of the tendency of sociological science to become didactic. As such it is not without significance. To demand that a collection of sociological discussions should exhibit a high degree of unity, above all when the discussions deal with the meaning of progress, would be asking more than was altogether reasonable; but, interesting as all the papers are, some of them are related altogether too distantly to the main purpose. Among the most business-like and to the point is Dr. Slaughter's short paper on the social significance of the imagination. "It is not maintained," he says, "that any Utopia either is, or need be, realised. The disparity between dream and deed need trouble no one, if the dream has sufficed to produce the deed." "But these clearly expressed Utopias are of little importance as compared with the more groping, but more powerful dream that may dominate the life of a period." As adolescence teaches, the present is determined by the future, actually the remote future. Most of the other papers, some of the writers of which seem to suffer from slight fevers of enthusiasm of a highly non-infectious

type, are an illustration or amplification of Dr. Slaughter's remarks. From Mr. S. H. Swinny we have a good and clear account of Comte's view of the future of society, a typical attempt to add a new force to those moulding the future and so to assist in the realisation of one's own prophecy. Prof. Geddes elevates the re-erection of Crosby Hall into a symbol of the immortality of the social soul. The Rev. Joseph Wood discourses of Utopias Past and Present, and is wisely sceptical as to the possibility of any readjustment of society putting an end to the supply of fools and wrongdoers. Mr. Victor V. Branford has chosen St. Columba as a study in social inheritance and reinterpretation in the phrasing of current science. This is an attempt to exhibit the individual quest of adolescence developing into the collective mission of manhood. It is more particularly a study of the effect of religious ideals, their hold over "the poetic surge of adolescence". The practical question is little more than stated: Can we cultivate varieties of the saintly type which shall have the qualities and not the defects of the mediæval saints? Dr. J. Lionel Taylor teaches that in Vocation and Marriage—our only two life-aims—we have what is capable of developing and increasing mental and physical power. Realise what your nature is, trust it, and develop it. The little book with all its defects is of interest in itself and as a sign of the times.

D. M.

The New Word. By Allen Upward. An Open Letter addressed to the Swedish Academy in Stockholm on the meaning of the word *Idealist*. New Edition. London: A. C. Fifield, 1908. Pp. 317.

This is undoubtedly a work of some genius, full of wit and out-of-the-way scholarship, and by no means lacking in wisdom. It deserves to be read, and I hope many will read it. The author's intention, in his own way of putting it, is to head "a rebellion of the Baltic against the Mediterranean mind," above all against the tyranny of "Mediterranean words" by showing men how true, strong, bright and mighty are those daily words which burn "with the long thoughts of a thousand Baltic generations". There is much point, if occasional extravagance, in his attack on the accepted language of science and philosophy, even if some of his own philological discoveries leave one rather dubious. He states his own philosophy of Strength and Hope in the simplest words: The Strength Within is played upon by the Strength Without, and what we call the Body is a network woven between the tiny Strength Within and the great Strength Without (p. 198). Whirl and Swirl or, if you must have a learned word, *Metastrophe*, is the meaning of life. Involution in the midst of evolution. The Outer Strength flows in and out of the Inner Strength, whirling as sense, and swirling as emotion. Ideal science is the science of the swirl (pp. 200-203). The Self, *one's elf, aelf* or *half*, is the One Half of the All-Thing, of which the Outer Strength is the Other Half (p. 208). The Strength Without has partly turned into the Strength Within, and has so far set bounds to its own strength. The Twin-wrestlers of the whirl-swirl are both God (p. 217). Fear is the enemy the Idealist has to fight, yet Fear and Hope are in Metastrophe. The Idealist foretells and founds the new religion only to be excommunicated by it. The Hope he teaches wrestles with heredity in the shaping of life, and evolution is the triumph of hope over heredity.

D. M.

Magic Squares and Cubes. By W. S. Andrews. With Chapters by P. Carus, L. S. Frierson, C. A. Browne, Jr., and an Introduction by P. Carus. Chicago: The Open Court Publishing Co., 1908. Pp. vi, 199.

Most of the essays which make up this little volume are reprinted, with slight modification, from recent numbers of the *Monist*. Dr. Carus refers to magic squares as "*lusus numerorum*," and Mr. Andrews remarks that they are, "of themselves, only mathematical curios". They have, however, the fascination of intellectual puzzles at large, so that the book will doubtless find many interested readers. The writers appear, indeed, to believe that they possess a further, truly mathematical importance; a concluding Note calls attention to the opinion expressed in 1892 by Major MacMahon that "problems of the general nature of the magic square are intimately connected with the infinitesimal calculus and the calculus of finite differences". But no attempt is made to work out this scientific side of the subject.

In chapters i. and ii. Mr. Andrews discusses the qualities and characteristics of magic squares and cubes, odd and even, and gives rules for their construction. In chapter iii. he and Dr. Carus analyse the squares of 8×8 and 16×16 which Franklin sent as an "arithmetical curiosity" to Collinson. In chapter iv. Dr. Carus offers a graphic key to the interrelation of the figures arranged in magic squares. In chapter v. Mr. Frierson undertakes a 'mathematical study' of the squares, and lays down rules which suffice "to produce all forms of 3×3 and 4×4 squares with their compounds," and whose principles apply, in large measure, to all other forms. In chapter vi. Mr. Browne offers an interpretation, on the basis of a square of 27-side with 365 at its centre, of the number of the State in Plato's Republic; the number comes out as 9855, not far from Jowett's 8000. Dr. Carus appends a comment. In the two final chapters Mr. Andrews treats of some curious magic squares and combinations, and of various constructive plans by which the squares may be classified.

P. E. Winter.

The Problem of Form in Painting and Sculpture. By A. Hildebrand. Translated and revised with the Author's co-operation by M. Meyer and R. M. Ogden. With thirty illustrations and a portrait. New York: G. E. Stechert & Co., 1907. Pp. 141.

When an artist writes a book upon the theory and practice of his art, the result is likely to be difficult to review. For a statement of the empirical principles and a description of the empirical procedure which give at once the measure and the expression of the artistic personality, the critic will have nothing but gratitude; and the greater the artist, the more valuable for theory will be this account of practice. But the theory which the author himself professes is, as a rule, only a generalised transcript of his practice; it is partial and one-sided, couched in a peculiar terminology, mainly interesting as a bit of individual psychology.

What holds in these respects of such a book as Ross's *Theory of Pure Design* seems to the reviewer to hold emphatically of Hildebrand's *Problem of Form*. The theoretical introduction, obviously a mere outline, and difficult reading whether in the original or in the present translation, must be supplemented and corrected at every point. The technical sections, on the other hand—with their insistence on the pictorial character of sculpture, on the necessity of a single dominant plane, on the mode of progression from front to back—these and the historical sketches are

admirably done, and it was distinctly worth while to render them into English.

It might be well, in a second edition, to gather the half-tones together in a series of plates at the end of the volume, and to refer forward to them from the text. As it is, they come distractingly early, and there are no back references on the pages which they are intended to illustrate.

P. E. Winter.

What and Why: Being the Philosophy of Things as They Are. By Shaw Maclaren. London: George Allen & Sons, 1908. Pp. xvii, 118.

Mr. Maclaren is perhaps of opinion that he is storming a stronghold of error in sending his book to Mind, for he believes that "the works of rationalistic or school philosophers" are "amiable and ingenious works of the imagination," which any one "who prefers reality exposed to theories expounded must gravely and resolutely for ever set aside" (pp. 99-100). His position is that the rational faculty is only applicable to physical facts. To deal with non-physical facts we must employ the spiritual or ethical faculty, which we all possess. Spiritual knowledge differs from rational in kind, in nature, and in method of attainment. The language of this highest knowledge is entirely symbolical, founded on the power of drawing analogies between the seen and the unseen world. Philosophy so-called is the mistaken habit of dealing logically with stereotyped analogies: Get rid of the bad habit and the happiest results will ensue. Mr. Maclaren has raised rather a big question, and reached rather harsh and sweeping conclusions, regard being had to the knowledge he displays of the whole subject and the slightness of his treatment; but his point is tolerably well put. One, however, to whom "concept" represents nothing actual; one who does not recognise that the language of science in turn is based in some instances on analogies between the unseen and the seen-think, *e.g.* of "energy"; one who does not see that it is the business of philosophy to scrutinise the conceptions of science, is overlooking too many facts. He also overlooks the fact that analogies, if they are to furnish real religions and philosophies must be arranged in some sort of system, and their coherency can only be judged by the rational faculty—into the nature and claims of which he would require to go ever so much more thoroughly. Nor does he know much about living philosophy, or the extent to which it is awake to the danger of falling a prey to the letter. He forgets, too, that the effort to be rationally spiritual is ineradicable in human nature; and, if he were just, he would recognise how much of imperishable spiritual significance has reached mankind enshrined in the systems of the great intellectualists.

D. M.

Friedrich Nietzsche: His Life and Work. By M. A. Mügge. London: T. Fisher Unwin, 1908. Pp. xi, 442.

As books on Nietzsche go, this one deserves mention because it contains a good deal of information and less nonsense than one usually expects from his admirers. Mr. Mügge is not a mere worshipper. He is even prepared to admit defects in Nietzsche's character and doctrine, but generally speaking he is in sympathy and has taken some trouble to bring together from various sources a deal of data regarding a man in whose importance he believes. The volume contains a Life of Nietzsche, a Critique and Appreciation, a Bibliography and Iconography, and a

portrait of Nietzsche. The extracts from Nietzsche (in English) are long and numerous. People who do not read German but have some curiosity on the subject of Nietzsche might do worse than look at this book. It is not for the philosophically trained.

D. M.

The Psychology of Advertising: a Simple Exposition of the Principles of Psychology in their Relation to Successful Advertising. By W. D. Scott. Boston, Mass.: Small, Maynard & Co., 1908. Pp. 269.

The first attempt at an applied psychology of advertising—partly experimental, partly statistical—was made by H. Gale in No. 1 of the ill-fated *Psychological Studies*, 1900 (Mind, April, 1901, p. 272). Three years later Dr. Scott published a book on the Theory of Advertising, the subtitle of which is repeated in the present volume. The Theory contained chapters on attention, association, suggestion, perception, apperception, imagery; the Psychology again discusses suggestion and attention, and treats further of memory, feeling and emotion, instinct, will, habit. The Principles of Psychology which are thus simply expounded are, of course, those of Prof. James. Among the practical questions considered are the relative value of large and small spaces (the "pronounced increase in space and decrease in the number of advertisers is perhaps the most astounding fact observed in the development of advertising in America"), the necessity of an æsthetic element in the advertising of food-products, the importance of securing the time of the buying public (shown by the high effectiveness of the overhead advertising cards in street-railway cars), and the motives which lead the general public to subscribe for a newspaper (as brought out by questionary returns). The book ends with a selected bibliography of advertising: there is no index.

Dr. Scott's analytical plough does not, perhaps, go very deep; but the soil which it turns is undoubtedly fertile. A great deal might be done, in the way of giving precision to results already roughly assured, by use of the elementary methods of statistical correlation. It is comforting to find that, on the whole, the types of advertisement most offensive to the cultivated mind are at the same time those least effective from the point of view of the merchant.

P. E. Winter.

Clinical Lectures on Neurasthenia. By Thomas Dixon Savill, M.D.Lond. Fourth Edition. London: Henry J. Glaisher, 1908. Pp. xv, 226. Price 7s. 6d. net.

The Third Edition of this lucid series of scientific and clinical lectures has already been noticed in Mind. In the Fourth Edition the author has a special note on the psychology and psycho-therapy of neurasthenia. The chief psychological symptom is failure of attention with consequent garrulity and prolixity. The chief points in "psychic" treatment are encouragement and hope, rest and peace of mind, change of environment, separation from friends, or isolation, hypnotism (difficult and occasionally successful), auto-suggestion, hetero-suggestion and persuasion. "Faith-healers innumerable are in this domain in rivalry with the Medical Profession, but, for my own part, of all the faith-healing cures I know, faith-in-your-doctor is the most potent" (p. 199). The author would probably allow that a scientific analysis of the doctor's capacity is, with many neurasthenics, an important preliminary to their 'faith'; but certainly mere "notional assent" is never enough. The bibliography has been brought up to date.

W. L. M.

A Primer of Ethics. By E. E. Constance Jones, Mistress of Girton College, Cambridge. London: John Murray, Albemarle Street, W., 1909. Pp. 101.

This little book should prove a useful introduction to those who are beginning the study of Ethics. The author does not attempt so much to sketch a system as to present in brief form the fundamental conceptions of the chief ethical theories. Sidgwick's influence, however, is predominant throughout. One or two of Miss Jones's assertions might be disputed, *e.g.*, that 'Aristotle's mean cannot properly imply more than quantitative regulation,' but her interpretation of authorities is usually well accepted, as it should be for a book of this kind. The Ethical Vocabulary and Questions appended add to the value of the work.

L. B.

Logique et Mathématiques. Essai Historique et Critique sur le Nombre Infini. Par Arnold Reymond. Saint-Blaise: Foyer Solidariste, 1908. Pp. ix, 218.

This book consists, as its title indicates, of a critical history. It is divided into three parts, the first dealing with antiquity, the second with the discovery and philosophy of the infinitesimal calculus, the third with the modern treatment of infinity by means of symbolic logic. The first two parts, as is inevitable in so short a book, are necessarily somewhat sketchy, but in the main they tell what is of most importance. It is, however, somewhat surprising to find in the second part, where there is hardly a mention of any of the great philosophers except Leibniz, a whole chapter (one out of four) devoted to Renouvier and M. Evellin. M. Reymond justly criticises Renouvier for supposing that the infinite could be replaced by the indefinite, since, as he points out, if a quantity can be subdivided indefinitely, it must contain an infinite number of parts. The views of M. Evellin, who regards space and time as finite and finitely divisible, are rejected, apparently on the ground that spatial and temporal continuity are data.

M. Reymond has a theory that zero is not a number like other numbers, but a mere possibility, "une possibilité d'un certain genre, la possibilité numérique" (p. 118). His reasons for this view seem to rest on some confusion. He says: "Some reflexions seem to justify this point of view. The expression $1 \div 0 = 1$ is very obscure from the logical point of view if zero enjoys exactly the same properties as other numbers. The unity in the first member of the equation is a given whole, which ought to be modified by the adjunction of zero, if this is a number like the others; this unity could not therefore be rigorously equal to that which appears in the second member" (*ibid.*). From this passage (as well as from certain others, *e.g.*, p. 172) it would appear that the author confuses arithmetical and logical addition, and does not distinguish between a number and a class having this number of members. "$1 + 0$" means "the number of terms in a class consisting of two mutually exclusive parts, of which one has one term, while the other has none." The second part here is null, and therefore the first part is the whole of the supposed class. It is not easy to see any logical obscurity in this.

The third part on "Logistic and Infinite Number," unfortunately shows a very inadequate knowledge of symbolic logic, and is full of elementary mistakes. The following are a few of these mistakes. On page 140, "p implies q" is said to be equivalent to "p is false, but q is true" (this may be a misprint); on page 142, a wrong definition of "p or q" is given, according to which "p or q" would be meaningless unless

p and q were both true or both false; on page 143, it is said that the product of two classes is equal to their sum, and on page 148, the product of a class of relations is spoken of where the sum is required. On pages 145 and 151, "*logical* constants" are spoken of where "constants" should occur. On page 146, the relation "greater or less" is said to be asymmetrical, whereas in fact it is symmetrical, since if x is greater or less than y, y is greater or less than x. Since M. Reymond proceeds to criticise various parts of the logical theory of number, it seems a pity that he has not first mastered it more thoroughly.

M. Reymond's main objection to the logical theory of number is that the word "all" cannot be applied to classes of numbers in the same sense as to other classes, on the ground that numbers form a series of terms all differing *inter se*, and that the fact that they form a series is essential. Assuming the definition of "12" as a class of classes, namely the class of all dozens, he says (p. 153) that the terms of this class, *quâ* dozens, are all alike, whereas the terms of the class "number" succeed each other in a definite order, and are all different one from another. It is very hard to see how this contention can be supposed to have any force. If the class of Apostles and the class of months are to be regarded as exactly alike *quâ* consisting of twelve terms each, so are 1 and 2 exactly alike *quâ* numbers. "The only property," he says, "common to all whole numbers is being obtained by a determinate law of succession" (*ibid.*) This is by no means true, since whole numbers have also, for example, the common property of being classes of similar classes. But even if it were true, it would not prevent numbers from forming a well-defined class. "The seed of Abraham" is defined by a certain law of succession, but that does not prevent it from being a well-defined class. A "law of succession" means a relation between any two consecutive terms; the field of this relation is then a class like any other, and the fact that the members (like those of any other class) differ *inter se*, offers no difficulty.

M. Reymond criticises at length the logical definitions of 0 and 1. His criticism of the definition of 0 (p. 170 ff.) seems to rest partly upon confusing a term with the class of which it is the only member, as when he says (p. 172): "The null-class is not a number; the arithmetical zero is therefore necessarily excluded from the null-class which therefore cannot serve to define it". The arithmetical zero is of course excluded from the null-class, since the null-class has no members, and therefore everything is excluded from it. But it is hard to see why, on this account, the null-class should not serve to define zero; the definition of zero as the class whose only member is the null-class is untouched by M. Reymond's remark. The bulk of his argument against the definition of zero appears to rest on the contention that no statement can be found which is false for every number. Yet M. Reymond himself contends that to every number 1 can be added. Hence the statement "n is a number to which 1 cannot be added" will be false for every number, and so will the even simpler statement, "1 cannot be added to n". Hence it would seem that his criticism cannot be maintained.

The conclusion reached by M. Reymond is as follows: "A nominal definition, either of whole number, or of infinite number, by means of logical constants alone, is impossible, and that principally because the principle of induction must be assumed as an indefinable, implying conditions of existence foreign to the relations envisaged by logistic" (p. 199). This conclusion cannot, in my opinion, be regarded as rendered in any degree probable by the preceding arguments, owing to the large number of misunderstandings which they contain, and to the assumption that general statements about all the members of a class are impossible if the

members differ *inter se* in a manner which gives rise to a series, as is the case with the finite integers.

B. Russell.

L'Idéal Moderne: La Question Morale, La Question Sociale, La Question Religieuse. Par M. Gaultier. Paris: Hachette et Cie, 1908. Pp. 355.

This book is written from the point of view of an optimistic idealist, who finds a never-failing solution for all philosophical difficulties in the conception of the higher synthesis. The method is familiar, but M. Gaultier's reapplication of it is on the whole justified by his quite unforced enthusiasm, by a notable lucidity of exposition, and by a thoroughness of treatment which, if not by any means invariable, is yet characteristic. The main antithesis which supplies M. Gaultier with material for criticism and construction, is, as might be expected, the antithesis between the abstract objective and the abstract subjective; between, for example, the theory of the scientist who interprets morality in terms of biological or sociological fact, and the creed of the formalist or intuitionist who invests the unexamined conscience with sacred authority; again between the theory that society is based on force, and the theory (not perhaps stated in so many words by M. Gaultier) that it is based upon the pure good will; or again between the political ideal of an absolute equality in which all individuality is lost in a system as abstract as that of any positive scientist, and of an absolute freedom in which the fact that man's nature is essentially social is ignored. M. Gaultier's criticism of these and similar antithetic abstractions is usually admirable; but his constructive reinterpretation is not always so satisfactory. Thus he rebukes the intuitionist for pausing upon an irrational hypothesis, and holds that Ethics is an inductive-deductive, though not positive science; and yet he claims for moral certitude validity which neither "logical nor sensible" certitude can possess. How if this claim be just, a science of Ethics can be anything but external and positive he does not explain. Again in his solution of the antinomy between abstract legality and abstract morality M. Gaultier shows some uncertainty. For at one time the 'moral' that is the essential correlate of the legal is represented as the ideal, at another as living and current ideas and customs. It would be dangerous optimism to claim for the psychological or historic present the unique right to be the ideal's representative; and though M. Gaultier never does so in as many words, yet both in this discussion and elsewhere he leaves us with a vague impression that such a claim, if made, could be justified. In his consideration of these two antinomies M. Gaultier perhaps forces his method to guarantee more than is legitimate; in his chapter on 'Morality and Religion,' on the other hand, he seems to refuse his method full play. For he accepts an ontological inference to a perfect reality from the fact of morality, and thus makes its objective significance identical with that of religion; whereas the moral attitude seems essentially to imply an ideal unrealised, and if the method is to be of any real value, this particular significance should be insisted on. M. Gaultier's discussion, it is only fair to say, is usually free from such ambiguities and irresoluteness. An especially good feature of the book is the practical treatment of immediate problems, such as poverty, and the place institutional religion should occupy in our modern life.

Louis Brehaut.

Dieu : l'Expérience en Métaphysique. Par Xavier Moisant. Paris : Marcel Rivière, 1907. Pp. xiii, 300.

The author divides his work into five sections which treat of The Existence of God, The Personality of God, The Divine Attributes, The Problem of Evil, and Psychological Experience and the God of Christianity. M. Moisant has a considerable acquaintance with recent and contemporary French thought, but the volume is greatly lacking in close and consecutive reasoning. The result is that the treatment is rapid and fragmentary throughout, and the conclusions are often only feebly connected with previous discussions. We are told in the first section, that Positivism, Agnosticism, Pantheism and Idealism all break down before Experience. It may be so, but there is nothing in the foregoing pages to justify the statement. In his second section the author gives a slight but fair exposition of some difficulties raised by the attribution of personality to God. But his reply is not satisfactory ; and he sometimes uses arguments which do not help his case at all. The evils of democracy in France and America, even if due to the lack of 'a directing personality,' are no relevant argument for a Supreme Ruler above: and would M. Moisant assert that the condition of France under that 'directing personality' Louis Quatorze was sounder than under the present régime ? In the following chapter there are some useful criticisms of those who explain the universe as a system of impersonal laws. Moisant criticises the term 'law' after the manner of Boutroux and Poincaré. But he will not go the whole way with them, and declares that law expresses a relative truth, which truth presupposes an Eternal Consciousness. Why it should be so is not made clear. The section on the Problem of Evil, if in no way original, contains sensible remarks. While the metaphysical problem is insoluble the practical issue is plain—this is the conclusion. In his last section Moisant pays some attention to Pascal's advice to adopt the attitude and perform the ceremonies of religion in order to produce belief. He finds something immoral in this, and advocates a 'loyal experimentation' which confirms us in the truth and protects us against illusions. It is more difficult to follow him when he contends that Catholic Dogma has the witness of experience in its favour, and maintains rational truths which pure reason does not firmly grasp.

In a brief reference to Pragmatism—which is rejected as a dubious ally—M. Moisant complains that its use of the term 'practical' is vague. But if 'pragmatic value' is an elastic phrase, so is *experience* in this volume. The writer does not take pains to make clear whether he is using the word in the individual, collective or historical sense ; nor does he seriously consider the way in which interpretation and inference enter into experience. As a contribution to a great subject, the book is unequal and disappointing.

G. Galloway.

Insuffisance des Philosophies de l'Intuition. Clodius Piat. Paris : 1908. Pp. 319.

M. Piat's book is a defence, against intuitionists of all kinds, of the rights of human reason, and the necessity and value of its work. First in the sphere of our knowledge of the external world, and then in theology and in ethics, he examines the nature and extent of all that different thinkers have claimed as 'immediately given,' and decides that it is quite inadequate without the use of inference and discursive thought. The

arguments against the validity of such thinking, moreover, are found when examined to fall to the ground. A large part of the book is naturally occupied with criticisms of particular writers. Since these include Newman and Sabatier, James, Bergson and Boutroux, J. S. Mill, Aristotle and Spencer, St. Anselm, Descartes, Leibniz, and Hegel, Malebranche, Fénélon, and Kant, it is evident that the foes of reason are found in many different quarters; and at several points the reader would certainly be glad of more explanation of the various meanings of 'intuitionist'. Yet the work hangs together better than might be expected, and the only thing which in the end seems baffling is the attribution to 'intuitional' theology of the ontological proof. Surely this is as much a matter of reason and argument as any proof of anything can be. Of course it rests on the alleged fact of our possessing a certain idea, but M. Piat's criticisms are directed for the most part against the inferences drawn from this fact by discursive thought, and therefore seem irrelevant to his general purpose.

Expositions and criticisms alike are admirably clear, and nearly always worth remembering. The treatment of M. Bergson's work is particularly valuable, in spite of an occasional common-sense literalness which seems to do a little less than justice to that rainbow-like philosopher. The book is a good and sensible contribution to the defence of reason.

HELEN WODEHOUSE.

Der Philosophische Kritizismus, Geschichte und System. By ALOIS RIEHL. Erster Band: Geschichte des Philosophischen Kritizismus. Zweite, neu verfasste Auflage. Leipzig: Verlag von Wilhelm Engelmann, 1908. Pp. vii, 614.

It is quite unnecessary to introduce the first volume of the long and eagerly expected new edition of Prof. Riehl's great work to the readers of MIND by any words of commendation or criticism. It has long been a great misfortune for English students of Kant, most of whom received their first initiation into the critical philosophy at the hands of teachers who leaned strongly towards the "idealistic" interpretation of the *Critique* that Prof. Riehl's weighty presentation of the case for the "realistic" interpretation should have remained so long inaccessible. Patience, however, has not, in this case, gone without its reward. The principles of interpretation adopted in the former edition have been retained unmodified, but the text has undergone so thorough a revision and expansion that the book, as it now lies before us, is almost a new work, rather than a second edition. Students of Kant, who will find Prof. Riehl's work in its new form an indispensable adjunct to the Kantian text, can only hope that the second volume, containing the actual exposition of *Kritizismus*, as understood by one of its foremost representatives, may not be long delayed.

A. E. TAYLOR.

Vier Vorträge über Entwicklungsstörungen beim Kinde. Von Professor D. G. ANTON, Direktor der Klinik für Nerven- und Geistes-kranke in Halle. Berlin: Verlag von S. Karger, 1908. Pp. 91.

These four contributions to the study of the feeble-minded include a discussion of the forms and causes of bodily infantilism, of mental infantilism, of the nervous and mental diseases incident to the onset of sexual maturity, and of some practical points in the management of the backward and degenerate children. Great stress is laid on the parts

played by the thyroid, the thymus, the supra-renal capsules, the pancreas, and other glands, in the arresting or promoting of development. Dr. Anton gives an elaborate but provisional classification of the forms of infantilism. In the mental section an effort is made to distinguish infantilism as such from imbecility, and a good deal of psychological detail is given to point the differences. There is also, in the remaining two papers, much practical direction for treatment both medical and institutional. The four pages of bibliography and the ten pages of names of institutions combine with the practical nature of the discussions to make this an excellent introduction to the study of infantilism.

W. L. M.

Gehirn und Schädel. Eine topographisch-anatomische Studie in photographischer Darstellung. Mit 69 zum Teil. mehrfarbigen Lichtdrucktafeln. Von Dr. Fr. Hermann, A.O., Professor der Anatomie an der Universtät Erlangen. Jena: Gustav Fischer, 1908. Pp. 12 + 69.

Since the introduction by Blum in 1893 of Formaldehyde for the fixation of tissues, much work has been done in the study of the cerebral convolutions, and especially in connection with their relation to the surface.

Dr. Hermann's book, *Gehirn und Schädel*, has made a valuable contribution to the topography of the brain. The work consists of sixty-nine plates from life-size photographs showing the relation of the convolutions and deeper parts of the brain to the sutures and contour of the skull, and it should prove a valuable help to the student of Anatomy and Psychology. In the profile views the author has wisely selected the left side of the brain, where, except in left-handed people, Broca's centre for speech is situated.

While no single brain can be taken as representing an invariable standard of the normal, those portrayed in this book may be taken as showing an arrangement usually met with. The work is enhanced by superimposed tracings showing the outstanding features of each photograph, and the publishers are to be congratulated on the excellent way in which these photographs have been reproduced.

J. M.

Geistige Strömungen der Gegenwart. Der Grundbegriffe der Gegenwart Vierte Umgearbeitete Auflage. Von Rudolf Eucken. Leipzig: Veit & Co., 1909. Pp. xii, 410. M.8.

The increased and well-deserved attention paid to Prof. Eucken ought to ensure many fresh readers of this important work, which now reaches its Fourth Edition. Prof. Eucken has wrought over some passages and added one on the "Wert des Lebens". He considers that he has given more precision to his main theses, dealt more immediately with the problems of the time, and taken more account of movements outside of Germany.

D. M.

L'Individualismo etico nel secolo xix. By Giovanni Calò. Napoli: 1906. Pp. 378. (Opera premiata. Napoli: 1904.)

L'Individualismo nelle dottrine morali del secolo xix. By Giovanni Vidari. Milano: 1909. Pp. 400. (Opera premiata. Napoli: 1906.)

L'Intolleranza e i suoi presupposti. By Giovanni Marchesini. Torino: 1909. Pp. 266.

In view of the multiplication of fields for investigation and of books, the surface fact of the first two titles would seem to be a result of those

'spleens' that 'make the angels weep,' or is it 'laugh themselves mortal' withal? Within three years, 1904 and 1906, at one and the same centre of learning, we see two treatises on the same subject winning 'prizes,' the later of the two in no way, implicitly or explicitly, developing, or being apparently expected to develop the materials and conclusions contained in the earlier volume. Altogether an intensely individualistic state of things—such as should itself supply material and conclusions for yet a third competition '*bandito su analogo tema*' during the current year! We are yet far from realising generally that ideal of organised and collective scientific research urged so eloquently by the young Renan, sixty years ago, as an absolute economic necessity of the near future (*Avenir de la Science*, pp. 248 ff.). In that humaner Eden of the To-Be, academies will be less keen to continue the competitive scrambles of schoolboys by offering prizes in the nobler world of adult scholars, and be rather concerned to act as the Labour Bureaux of Research, as intermediaries and organisers of scholar with scholar, and of scholar with materials.

While however we may, on the one hand, deplore the wastage, for writer and reader, as we watch, in our two treatises, the same names of thinkers and of books marshalled before us and, like Emerson's 'hypocritic Days,'

marching single in an endless file,

we hasten to admit, on the other hand, not only the ample scope of the subject for diverse points of view, but also our satisfaction at the fact of its being so emphatically selected. The distinctive attitudes of the two authors in their analyses of the concept of individualism, and the different results obtained by each vindicate to some extent an individualism in treatment.

An analogous analysis of the concept of 'personality' may be said to form the centre-point in the third book under consideration—G. Marchesini's *Intolerance und its Presuppositions*—since, apart from historical treatment, intolerance can only now be interesting as the expression of something in the psychology of the personal, or the social unit. Personality or individuality, according to Mr. Marchesini, reveals under analysis the four main attributes of *transitivity* with *continuity*, *individuation*, *value* and *relativity*. Or rather, it is a *system of values* and a *system of relations*, and the former of these systems 'subsists through the effect of' the first-named twin characteristics. Of these, 'continuity expresses the possibility of mind increasing' (*incremento*), 'binding, as it does, the successive mental moments' constituting the transitivity one to another. Here we should have preferred to see continuity called the binding, and not raised into a mythical entity-which-binds. And we should have liked to see this ingenious analysis rendered more convincing by a constructive effort of synthesis.

The significance attaching to the prominence which such study of individualism and individuality is gaining in philosophy can scarcely be over-rated. When philosophical ultimates are analysed and criticised, it may well be due to the felt need of fresh correlating. England has contributed more than her quota of great individualistic thinkers, notably in ethics and political economy—*is* contributing them, according to Mr. Vidari, who thus summarises the philosophy of Mr. Schiller (with that of Prof. James)—"historically and logically connected with the instinctivistic irrationalism of Nietzsche . . . and based on the gnoseological conclusions of other contemporary philosophic currents, especially on contingent indeterminism, and on the newer experientialism . . . their moral doctrine attains nevertheless a form of individualism only classifi-

able as instinctivistic". But we have not as yet met with any notable Anglo-Saxon essays analysing or criticising such concepts, and we are reminded of Matthew Arnold's quip at the want of self-consciousness about Philistinism in England, and as to the lack of 'solecistic' critique at Solœ. It may console us to think that we shall probably get more thoroughly 'sicklied o'er with the pale cast' when our evolutionary moment arrives, and, it may be, go one step further than our neighbours.

The distinction and the justification of the individualistic ideal—whether it find expression in genius, in anarchistic dreams, in religious regeneration, or in the perfectly cultured personality—is nobly expressed and *socialised* thus, by Mr. Calò: "When the individualist revolts against a sterile state of society, or one in which the free energy of the unit is violently repressed, it is not because he feels himself outside of, and hostile to society, but because he realises his membership of a better and more advanced society, of an ideal society" . . . which recalls Emerson's pregnant comment on the hint of sarcasm in a beautiful face as implying: "Yes, I am willing to attract, but . . . a little better kind of a man than any I yet behold". This is perhaps the last and best word in the socialisation of individualism. But that word has not yet been uttered with respect to the relation of personality to the universe and to universal law.

C. A. F. Rhys Davids.

Il Concetto della Natura e il Principio del Diritto. Giorgio del Vecchio. Milan: Fratelli Bocca Editori, 1908. Pp. 174. L. 5.

The Kantian distinction between the phenomenon and the thing-in-itself is no less valid for the theory of jurisprudence than for natural science. Nature as phenomenon is entirely subjected to the *a priori* category of causality, and hence natural science is justified in demanding a purely mechanical explanation of all processes, including those of life and consciousness. But the causal connexion between phenomena itself implies the permanence of the underlying noumenon, which can only be conceived in terms of teleology. Hence the teleological conception of nature as a progressive realisation of ends, and the schemes of valuation based on this conception, are equally valid with the constructions of mechanical science. Nature is throughout teleological, as noumenon, and throughout mechanical as phenomenon. Similarly, Kant is right in holding that the true expression of morality is the categorical imperative which arises from the character of man as noumenon. The systematic unfolding of the contents of the categorical imperative as a scheme of social relations (*relazioni di convivenza*), is Jurisprudence. The assertors and the impugners of the "law of nature" have alike erred by failure to recognise this connexion between jurisprudence and the noumenal. Both have understood by "law of nature" a supposed actual code under which mankind lived in some obscure past. In this sense the "law of nature" is a fiction, and the positivist is justified in treating all existing codes as products of a social environment, and calling for their causal explanation. But the validity of a transcendent norm is independent of its actual recognition. The "law of nature" should be thought of as the ideal towards which all actual progressive legislation tends to approximate; *i.e.*, as a scheme of social relations which adequately embodies the Kantian conception of "humanity always an end, never a means". So understood, it is an indispensable standard for the evaluation of actual legislative progress.

Prof. del Vecchio's essay is illustrated by notes attesting a wide familiarity with the whole range of the literature of the subject, and its

conclusions will probably appeal to every one except the "radical empiricists" in moral philosophy. I confess myself unconvinced by the rigid Kantian orthodoxy of the form in which they are presented. If "nature" is really teleological, it seems to me that there must be a point at which the attempt to carry out the conception of it as a pure mechanism will break down, a region where "explanation by causes" will be found futile. And a good deal might be urged against the author's identification of the equations of mathematical Physics with "causal laws". But all this is perhaps matter for "another branch of philosophy".

A. E. Taylor.

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Dimitri Michaltschew, *Philosophische Studien, Beiträge zur Kritik des modernen Psychologismus*, mit einem Vorwort von Prof. Dr. Johannes Rehmke, Leipzig, W. Engelmann, 1909, pp. xv, 573.

Henry von de Vos, *Werte und Bewertungen in der Denkevolution*, Berlin, Curtius, 1909, pp. 206.

W. Hilger, *Die Hypnose und die Suggestion, ihr Wesen, ihre Wirkungsweise, und ihre Bedeutung und Stellung unter den Heilmitteln*, Jena, Gustav Fischer, 1909, pp. 194.

Benedetto Croce, *Filosofia come Scienza dello Spirito*, III. *Filosofia della Pratica, Economica ed Etica*, Bari, Laterza & Figli, 1909, pp. xix, 415.

Giorgio Del Vecchio, *Su la Teoria del Contratto Sociale*, Bologna, Zanichelli, 1906, pp. 118.

Giorgio Del Vecchio, *Il Sentimento Giuridico*, Seconda Edizione, Torino, etc., Fratelli Bocca, 1908, pp. 26.

Rivista di Filosofia Neo-Scolastica, Pubblicata per cura di un Gruppo di Studiosi, Anno 1, N. 1, 13 Gennaio, 1909, Direzione e Amministrazione Libreria Editrice Fiorentina, Firenze.

Giorgio Del Vecchio, *Los Supuestos filosóficos de la noción del Derecho, Traducción y Prólogo de Mariano Castaño*, Madrid, Hijos de Reus, 1908, pp. 210.

VIII.—PHILOSOPHICAL PERIODICALS.

Philosophical Review. Vol. xvii., No. 6. **C. M. Bakewell.** 'On the Meaning of Truth.' [Starts out from the naïve view of truth as something objective, to be sought and discovered; works from this to the view that "truth is always conceiving a particular object in the light of its 'idea,' its concrete universal, that is to say, simply conceiving it in its total context or setting"; "we may then define truth as grasping the transient fact in its transcendent context". Truth is not therefore identical with reality, "for the judgments and conceptions which state the true meaning of the facts should be distinguished from the facts whose true meaning is in them reported, even from an absolute point of view". The copy-theory gets its plausibility from the substitution for the individual investigator of "a rational observer of a common order of experience".] **J. E. Creighton.** 'The Nature and Criterion of Truth.' [Philosophy is matter for the systematist, not for the essayist. The history of philosophy leads to the belief that experience is to be conceived as process; that truth has to do with the interrelation of the parts of this process; that knowledge is the process whereby the individual and the race attain consistency of experience; that consciousness is the immanent and dynamic function of interpretation in experience; and therefore that the relation of mind and reality is essentially inner and organic. If we criticise pragmatism on this basis, we see that, while it is a timely protest against abstraction, it tends to deprive thought or reason of all hegemony in experience; or that, if it be given the widest interpretation, it may be accepted by idealism, but must then be supplemented by a theory of reality.] **H. W. Wright.** 'Self-realisation and the Criterion of Goodness.' [It has been said that self-realisation fails to furnish a standard for the evaluation of conduct. But if we can clearly conceive the demands of the self in its unity, we shall be able to discriminate actions which fulfil these demands (good), and actions which gratify only a part of them (bad). Now the self is an organising agency. Hence the object of supreme worth is a completely organised life, and the criterion of moral value must refer directly to such organisation. And organisation implies the actual conditions of human life: the adjustment of natural impulses, of self-interest and the interests of others, of the individual to the cosmic order. Thus regarded, self-realisation offers a criterion of good and evil that may be put to practical use, and is itself brought into line with universal evolution.] **G. W. Cunningham.** 'The Significance of the Hegelian Conception of Absolute Knowledge.' [Hegel's conception of thought, as given in the category of absolute knowledge arrived at by the procedure of the *Phenomenology of Spirit*, is based directly upon our actual knowing experience. Absolute knowledge is, first, objective, in the sense that it transcends the individual and expresses the essence of things. It is also universal; not in the sense of formal logic, but in that of a "synthesis of differences," the inclusive living unity of mind. "Therefore, when Hegel teaches that thought is conterminous with the real, he is simply stating the doctrine that

experience and reality are one."] Reviews of Books. Notices of New Books. Summaries of Articles. Notes. [F. Thilly on Prof. Friedrich Paulsen.]

Psychological Review. Vol. xv., No. 4. **M. Meyer.** 'The Nervous Correlate of Pleasantness and Unpleasantness.—I.' [Abstracts a 'collection of contradictory views' (Lagerborg, Fite, Stumpf, Pikler, etc.) of the nature of feeling, as a preliminary to constructive work.] **H. H. Bawden.** 'Studies in Æsthetic Value, I. The Nature of Æsthetic Value; with a Critique of Miss Puffer's Theory of its Alleged Absoluteness.' [The writer accepts Urban's definition of value as "the selective funded affective-volitional meaning" of an object for a subject, but insists that the distinction of value and meaning, description and appreciation, is functional only. He then discusses the two theories of the æsthetic attitude, those of survival (the attitude is pre-reflective) and of consummation (post-reflective), and finds that "both are true: the one is but the negative counterpart of the other". Miss Puffer's ultimate laws of beauty are really "the capitalised culture-reactions of the past history of the human race". All æsthetic judgments are derived: and this means that the standard of judgment is not fixed, absolute, timeless, but is to be sought in the type, "in the relationship of beauty to the conditions out of which it has grown".] **R. W. Sellars.** 'An Important Antinomy.' [The antinomy may be phrased, with Bradley, thus: "nature is only for my body; but, on the other hand, my body is only for nature". It arises from the double meaning of 'nature,' which in the first clause "must be looked upon idealistically, as a construct of mine" and in the second refers to the macrocosm of reality, other than my experience. Now in the brain the two natures meet; so the antinomy leads us to the mind-body problem. This may be solved by way of functional identity: reality as process may be looked at from the side of conservation, and we have its invariant aspect, stated in terms of phenomenal energy; or it may be viewed from the side of variancy, and we have consciousness. The advantage of such a solution is that we may accept the efficacy of consciousness without running against the principle of the conservation of energy.] **O. Nagel.** 'On Seeing in the Dark: Remarks on the Evolution of the Eye.' [Speculative inferences from the now generally accepted doctrine of the functional difference of the rods and cones.] Discussion. **B. H. Bode.** 'Some Recent Definitions of Consciousness.' [Reviews the recent articles by James, Perry, Dewey, McGilvary and Woodbridge. Concludes that, from the point of view of an intelligent scepticism, "whether an adequate definition of consciousness can be obtained seems a matter for legitimate doubt".] Vol. xv., No. 5. **H. H. Bawden.** 'Studies in Æsthetic Value, II. The Nature of Æsthetic Emotion.' [The writer starts out from Herrick's theory that the conditions of pleasurable feeling are irradiation (1) along lines of habitual response; (2) of stimuli whose summation and discharge fall within the limits of the normal function of the organs involved; he shows that this theory comports with the relativity of pleasantness and unpleasantness. He then passes, by way of Marshall's statement that only the permanently pleasurable can be æsthetic, to a formulation of the general law of the æsthetic consciousness: the maximum of intellectual meditation compatible with its remaining a pleasurable value-experience. The formula is tested by a detailed criticism of Puffer's theory of 'repose in excitement' or 'combination of favourable stimulation and repose'.] **M. Meyer.** 'The Nervous System Correlate of Pleasantness and Unpleasantness, II.' [The nervous system must be considered as an integration of reflex arcs; and its consequent functions are variation of response, sensory condensation,

motor condensation and inhibition. The correlate of sensation then appears as the nervous current itself, while the correlate of pleasantness and unpleasantness is the increase or decrease of the intensity of a previously constant current, if the increase or decrease is caused by a force acting at a point other than the point of sensory stimulation. The theory is tested by brief and schematic reference to a dozen of the more important facts in the psychology of feeling.] **H. A. Peterson.** 'Correlation of Certain Mental Traits in Normal School Students.' [Tests were devised for accuracy (copying of a bibliography), memory (reproduction after dictation), reasoning (logical, arithmetical, geometrical problems), generalising power (generalising from printed data, general-knowledge questions), and power to understand abstract thought (recasting of paragraphs from works on political economy, philosophy, psychology), and the results were correlated in the usual way. The values of the coefficients of correlation are, naturally, much higher than those ordinarily obtained for the simpler mental processes. After considering various objections to his procedure, the author concludes that every test involved several kinds of ability, but that some one kind was predominant; and that it is this predominant ability that was measured by the tests.] Vol. xv., No. 6. **C. H. Cooley.** 'A Study of the Early Use of Self-Words by a Child.' [Record of observations of a girl, relating chiefly to a period of about a year, beginning with the twentieth month. "The child gradually comes to notice the indications of self-feeling (the emphasis, the appropriative actions, etc.) accompanying the use of 'I,' 'me' and 'my' by others. These indications awaken his own self-feeling, already existing in an inarticulate form. He sympathises with them and reproduces them in his own use of these words. They thus come to stand for a *self-assertive feeling or attitude*, for self-will and appropriation."] **M. Meyer.** 'The Nervous Correlate of Attention.'—I. [(1) The fundamental laws of nervous function. The neuron systems are likened to pipe-systems filled with fluid and furnished with valves; the function analogous to that of the valve-gear of a steam engine is explained by reference to the dynamic law that hydraulic is less than hydrostatic pressure. (2) The uniqueness of pain reactions. If the pain reaction is repeated, owing to continuance of stimulus, the movement is not the same, but differs in every reaction. (3) The susceptibility of connecting neurons. Explanation of the establishment of special forms of habit.] **H. C. Stevens.** 'Peculiarities of Peripheral Vision.—II. The Perception of Motion by the Peripheral Retina.' [In a previous paper the writer showed that objects imaged on the nasal retina of the right and on the temporal retina of the left eye appear larger than similar objects oppositely imaged. This difference of space perception is the condition of the apparent increase in the rate of motion of objects indirectly viewed. For (1) the distribution of the size illusion, in the visual field, is exactly coextensive with that of the rate illusion. And (2) the former is fundamental, because the differences in space perception appear with motionless cardboard discs.] **B. Sidis** and **H. T. Kalmus.** 'A Study of Galvanometric Deflections due to Psycho-physiological Processes.' Part I. [Brief review of work so far done. (The only reference is to the paper by Peterson and Jung in *Brain*, 1907; these authors, however, give a bibliography.) Description and arrangement of apparatus.] Discussion: **F. J. E. Woodbridge.** 'Consciousness and Meaning.' [Reply to Bode. "When objects become known, they do not . . . lose any of the properties or relationships they had before. . . . But when objects become known, then they mean something." It is not necessary to add 'awareness'; awareness is but another term for consciousness.]

American Journal of Psychology. Vol. xix., No. 4. **F. L. Wells,** 'Normal Performance in the Tapping Test before and during Practice. with Special Reference to Fatigue Phenomena.' [An attempt to standardise a "psychological measure of a relatively high degree of simplicity, precision and responsiveness," that of the maximal rate of repeated ten voluntary movements. Report of eighty experiments (two each upon normal individuals, and thirty each upon two individuals), the exper ment consisting of two records (right and left hands) of five thirty-sec. series fractionated into six successive five-sec. intervals. Rest-periods of two and a half min. intervened between series. We select a few of the results. (1) The most important aspects of the practice effect are gross gain and the warming-up phenomenon. (2) Fatigue tends in all respects to decrease variability. Subjective condition, as estimated introspectively, bears no relation to gross rate; susceptibility to fatigue is, however, greater when the grade assigned is 'good'. The ratio of the first to the average of the later interval-performances gives an 'index of fatigue,' which may be used to express quantitative relationships in susceptibility and immunity to fatigue. (3) The right hand is ordinarily more immune to fatigue than the left. The left hand does not improve by practice more than the right. Under the conditions, the warming-up phenomenon appears clearly in the right-hand series of unpractised subjects; it is not so clear for the left hand. (4) Individual differences are large, and their neural conditions cannot be stated. The 'index of right-handedness' (Woodworth) is a distinct point of individual difference.] **C. E. Ferree.** 'The Streaming Phenomenon.' [Gives sketches and descriptions of the phenomenon for various observers. Compares the accounts of the phenomenon with published accounts of the circulation and of other entoptic movement phenomena (*e.g.*, Purkinje's *wandelnde Nebelstreifen*); concludes that the streaming has not been observed by previous students of psychological optics.] **J. C. Bell, G. E. Hatch, L. T. Ohr.** 'The Effect of Suggestion upon the Reproduction of Triangles and of Point Distances.' [Discusses the effect of auditory and visual suggestion upon the estimation of vertical distances, as evidenced in the graphic reproduction of the figures. The aggregate error without suggestion is positive (overestimation); the type remains constant for a given observer; four observers showed the positive, two the negative type. There are marked individual differences in suggestibility. The suggestion of underestimation is more effective for the positive type, less effective for the negative type, than that of overestimation. Suggestion is most effective at the outset of an investigation.] **M. Ashmun.** 'A Study of Temperaments as Illustrated in Literature.' [Classification of literary figures mainly in terms of Ribot's classification of characters.] **H. E. Houston** and **W. W. Washburn.** 'The Effect of Various Kinds of Artificial Illumination upon Colored Surfaces.' [Comparison, at a single constant intensity, of variously colored surfaces illuminated by daylight, incandescent, are and oil lamps, candle, gaslight, and Welsbach burner.] **E. B. Titchener** and **L. R. Geissler.** 'A Bibliography of the Scientific Writings of Wilhelm Wundt.' [First instalment of 215 titles, 1856-1908.] Minor Communications. **J. W. Harris.** 'On the Associative Power of Odors.' [The secret of the suggestive power of odours lies simply in the fact that that they are observed with interest, and are so infrequently experienced that the preponderant association is not blotted out by others.] **L. G. Winston.** 'Myself and I: a Confession.' (Brief account of a normal condition approximating that of dual personality, and characterised by the persistence of a younger along with the elder 'self'.] Psychological Literature.

JOURNAL OF PHILOSOPHY, PSYCHOLOGY AND SCIENTIFIC METHODS. v., 15. **J. E. Boodin.** 'Energy and Reality: II. The Definition of Energy.' [An interesting paper coming to the conclusion that energies may be classified in three fundamental groups—material, electrical and conative; and that if their unification should ever prove to be feasible, it would be in panpsychist terms.] **T. P. Bailey.** 'Organic Sensation and Organismic Feeling.' [A vivid study in the concrete psychology of the whole man, describing introspection during an absurd lecture.] Report of the Section of Anthropology and Psychology of the New York Academy of Sciences. v., 16. **E. A. Kirkpatrick.** 'The Part Played by Consciousness in Mental Operations.' [Dr. Morton Prince's evidence for a co-conscious 'sub-conscious' is so difficult to test that "it seems safer for the scientist to attempt to use the physiological explanation until more is known". Does not say how more is to be known if the physiological theory happens to be wrong.] **A. W. Moore.** 'Truth Value.' [A brilliant paper criticising the 'special-instinct view of thought' that "*true* judging is the satisfaction of a want—the purpose, namely, to judge *truly!*" and concluding that "judging means inquiry, inquiry means *doubt*, and doubt means *conflicting impulses*".] v., 17. **G. Salvadori.** 'Positivism in Italy.' [Ardigo and Varisco.] **G. F. Dodson.** 'The Function of Philosophy as an Academic Discipline' [Philosophy "deserves the contempt it receives if its final effect is to impair confidence in the validity of those inferences which we have to make in order to live".] **G. A. Tawney.** 'Ultimate Hypotheses in Psychology.' [Miss Calkins's.] v., 18. **H. R. Marshall.** 'Subattentive Consciousness and Suggestion.' [Reply to Kirkpatrick, v., 16. Substitutes the 'subattentive' for the subconscious, and contends that "the field of inattention is fundamentally of the same nature as the field of attention," that 'auto-suggestion' is volitional control, and that prayer is a form of suggestion.] Contains also a long review of three books on Darwinism. v., 19. **F. Thilly.** 'Friedrich Paulsen.' [An obituary notice.] **J. H. Farley.** 'Types of Unity.' [Distinguishes *ten:* "(1) Individuality, (2) logical indivisibility, (3) substantive or dynamic indivisibility, (4) allness, (5) bare continuity, (6) concatenation, (7) harmony, adjustment or order in the bare content, (8) kinæsthetic purpose, (9) teleological unity, (10) immediacy to all," and confronts current monism with much the same problem as existed for the 'philosophy of the Unconscious' when its author subsequently distinguished nineteen different senses of 'unconscious'.] **J. H. Tufts.** 'Ethical Value.' ["Value belongs to objects of consciousness, and not to objects or things apart from consciousness." Ethical value is "the value which belongs to objects in the ethical consciousness".] v., 20. **H. H. Bawden.** 'A New Scientific Argument for Immortality.' ["A mode of activity, a value, once come into being cannot perish. It may be transformed. It must be transformed in order to endure, since the essence of being is in becoming. But this transformation cannot mean its destruction, for this would mean the annihilation of reality."] **R. W. Sellars.** 'Critical Realism and the Time Problem: I.' [Idealism cannot solve it. As absolute idealism, it confesses that if time is real the Absolute is a delusion. As personal idealism, it lapses into panpsychism and pluralism in order to solve it. Critical Realism must construe reality dynamically. It must conceive organisation not as an unchanging entity but as a form developing in time. Real time is identifiable with change. But things do not change at the same rate.] v., 21. **J. A. Leighton.** 'Time, Change, and Time-Transcendence.' [Admitting the distinction between perceptual time-series and the pure concept of time which is an abstraction from the changing order of consciousness, can we not

imagine that "the continuous fulfilment of human ends presupposes the ultimate reality of a supreme and controlling system of cosmic ends, in which human ends and values must be integral elements, though we may not be able to see how this is so"?] **T. Nakashima.** 'The Time of Perception as a Measure of Differences in Sensations.' [Tables.] **G. S. Fullerton.** 'The Meeting of the Third International Congress of Philosophy at Heidelberg.' [Thinks it has been of value.] v., 22. **E. B. McGilvary.** 'The Chicago "Idea" and Idealism.' [Argues that though Dewey is not an idealist in the sense he gives to "idea," he is in the current sense that 'all reality is regarded as embraced within experience,' and that he blurs the distinction between fact and idea, observation and inference, and ignores the existence of *datissima datorum*.] **R. W. Sellars.** 'Critical Realism and the Time Problem.—II.' ["Change is characteristic of the individual, but so is organisation and the conservation of past activities," and "the need of bringing his past experience to bear upon present problems puts a premium" upon the construction of conceptual out of perceptual Time.] Contains also a long review of Bergson's *Evolution Créatrice*. v., 23. **A. Schinz.** 'Prof. Dewey's Pragmatism.' [Holds that Dewey ultimately reduces the logic of ethics to the logic of science, though this is the opposite of what he intended to do, and lands in the *science des mœurs*.] **H. C. Brown.** 'Infinity and the Generalisation of the Concept of Number.' ["Mathematicians have committed the fallacy of converse accident in their generalisation of the concept of number and only the finite numbers are legitimate."] **M. W. Calkins.** 'Ultimate Hypotheses in Psychology.' [Reply to Tawney in v., 17.] v., 24. **A. C. Armstrong.** 'The Evolution of Pragmatism.' [A paper read at the Heidelberg Congress. Integration and differentiation are both taking place, especially the latter. There is agreement that Pragmatism is a method and is not subjectivism, and applies variously to different subjects. But Dewey appears to diverge from James and Schiller as regards humanism and metaphysics.] **J. E. Downey.** 'Automatic Phenomena of Muscle-Reading.' [Experiments pointing to the conclusion that "automatism with a certain amount of elaboration may be the lot of a greater number of us than has usually been supposed".] **F. C. Sharp.** 'Custom and the Moral Judgment.' [Comments on A. O. Lovejoy's review of the author's inquiry in v., 20.] v., 25. **J. A. McVannel.** 'Edward Caird.' [Obituary.] **C. H. Judd.** 'The Doctrine of Attitudes.' [Pleads for making fundamental the "division between objective sensations and subjective reactions" on the ground that there is no proper place for attention in the triple division of consciousness into cognitions, feelings and volitions, which breeds "confusion without end," and that "feelings and attention belong together".] **F. N. Spindler.** 'Some Thoughts on the Concept.' [The older, formal doctrine of the concept was formulated by pronounced visualisers (realists, conceptualists) or audiles (nominalists), and overlooks its motor function, and functional value. Students should be taught that "concepts are only possibilities, not entities or fixed ideas," and that "the only reason for ever seeking the abstract and general and logical is that we may conquer, manage and take a rational attitude towards the real, the concrete, the particular".] Contains also an important review of Hébert's *Le Pragmatisme et ses formes diverses* by **W. James,** who once more repudiates the charge of subjectivism and urges that the pragmatist account of truth is the only one extant, and that anti-pragmatist criticism is "the renunciation of all articulate theory". He proceeds to explain that the apparent difference between his account of truth and Schiller's is due to the fact that whereas the latter starts from the subjective pole of the cognition process

and is not bound to treat of reality-in-itself as opposed to reality-as-known, he himself starts from "the object-pole of the idea-reality chain" and so traverses the same path in the opposite direction. v., 26. **F. M. Urban.** 'On a Supposed Criterion of the Absolute Truth of Some Propositions.' [Criticises Royce's attempt to extract absolute truth from indirect proofs in mathematics. (1) As all mathematical truths can also be proved indirectly, absolute truth must belong to all or none. (2) They all depend on a set of fundamental propositions, and hence none possesses absolute truth, since there exists no logical necessity for accepting any system of such propositions. (3) The principles of logic may be called absolutely true in that no proposition in an abstract system may contradict them, but the problem remains "why phenomena of actual experience also must comply with them," or "why the laws of thought are also the laws of things," of this problem the solution is begged, if the principles of logic are declared absolutely true.] **J. L. Perrier.** 'The True God of Scholasticism.' [He is not so 'remote and vacuous' as James takes him to be.] vi., 1. **H. R. Marshall.** 'Algedonics and Sensationalism.' [Pleads for a qualitative view of pleasure and pain as against a sensationalist view of them.] **J. Dewey.** 'Objects, Data and Existences; a Reply to Prof. McGilvary.' [*Cf.* v., 22. Denies (1) that *datissima datorum* have been denied, seeing that a situation needing conceptual reconstruction is always postulated; (2) that such data are facts in the scientific sense, or (3) higher than the facts constructed out of them; (4) that he is any more of an idealist than his critics, whose terms, however, are ambiguous.]

International Journal of Ethics. Vol. xix., No. 2, January, 1909. **F. Thilly.** 'Friedrich Paulsen's Ethical Work and Influence.' [A statement of the fundamental principles of his ethics with special reference to their practical setting and significance.] **J. S. Mackenzie.** 'The Late Dr. Edward Caird.' [A brief eulogy of his work and character.] **M. E. Sadler.** 'The International Congress on Moral Education.' [An interesting account of its origin and character, and of the three outstanding episodes of its proceedings—discussions of (1) the degree in which the great English public schools foster a sense of civic obligation, (2) the value of systematic courses of direct moral instruction as helps in the formation of right principles of conduct, (3) the relations between religious education and moral education.] **H. H. Schroeder.** 'Self-esteem and the Love of Recognition as Sources of Conduct.' [An analysis of these 'feeling-dispositions,' in the large variety of forms and grades which they assume in individual character and action, with a careful appraisement of them and some suggestions as to their treatment in education.] **A. W. Benn.** 'The Morals of an Immoralist—Friedrich Nietzsche.—II.' [A critical examination of Nietzsche's doctrine of the superman. Shows the many changes and inconsistencies in his conception; and, incidentally, that he was persistently unjust to the philosophers (*e.g.*, the English thinkers, Darwin, Mill and Spencer) to whom he owed most. His professed immoralism is grounded on an appeal to a higher morality.] **W. M. Urban.** 'The Will to Make-Believe.' [Make-believe or practical assumption is the key to life. "Our passional nature, with its instinct to make-believe, not only lawfully may but really must do so when the make-believe is genuine or whole-souled, that is, when it is, in turn, the necessary condition or resultant of some other belief, the only alternative of which is disbelief and scepticism. . . . When the realisation of an end, itself useful or good, depends upon the reflex effect upon ourselves of the assumption, even pretence, that we already have it, then make-believe, pretence, is

certainly a lawful and probably an indispensable thing."] **C. Heath.** 'Crime and Social Responsibility.' [A short paper referring especially to a recent pamphlet on the subject by Dr. Bernard Hollander. But urges the need of an ethical along with the physiological and medical attitude to the problem.] Book Reviews.

The Sociological Review. Vol. ii., No. 1, January, 1909. **A. E. Zimmern.** "Was Greek Civilization based on Slave Labour?" [Authorities disagreed about the nature, causes and consequences of slave-labour in Greek City-States. Sure foundation for investigating facts in studies of economists on working of slavery in more recent times, *e.g.*, Cairnes' *Slave Power*. Aristotle was not a dispassionate political observer or a trained economic reasoner. Greeks practical men of affairs, not contemplative æsthetics with their material needs ministered to by tame drudges. The conditions which are natural result of slave-labour did not obtain in Greece. To understand what did obtain we must distinguish between chattel-slavery and apprentice-slavery. A slave who can own property is serving his apprenticeship to freedom. Both forms in Greek City-State but apprentice-slavery predominant.] **J. H. Leuba.** 'Magic and Religion.' [Whether Magic antedated Religion or not—in its primary forms it probably did—Religion arose independently of Magic; they are different in principle.] **W. Trotter.** 'Sociological Application of the Psychology of Herd Instinct.' [Application of biological conceptions to man and society as they actually exist, and discussion of the effect of Gregariousness on the future of man.] **J. A. Hobson.** 'The Psychology of Public Business Enterprise.' [Analysis of the structural changes of industry involved in socialisation. Might result in waste of controlling and co-ordinating power unless counterbalanced by a new public spirit and new methods of popular control. The further fear of a corrupt use of political power by socialised workers a vice of crude democratic methods, not specially of Socialism.] Discussions, Reviews, etc.

Archives de Psychologie. Tome vii., No. 4. **E. Claparède.** 'Classification et plan des méthodes psychologiques.' [Psychological methods fall, primarily, into four groups, according as the direct psychophysical process by means of which measurement or analysis is made is a phenomenon of reception, judgment, execution or expression. Under each one of these headings we have quantitative (psychometrical) and qualitative (psycholexical) methods. In the former, measurement may be expressed in terms of amount of stimulus (psychophysics), duration of process (psychochronometry), work done (psychodynamics), or number of observers (psychostatistics). In the latter, description or appreciation is based upon subjective analysis (introspective psychology) or external indications (extrospective psychology). Illustrations are given of the various types of method, and a final note outlines a classification of the methods of animal psychology.] **J. Varendonck.** 'Les idéals d'enfants.' [Report based on questionary returns. The child idealises, first, the characters of persons in his immediate surroundings; then the characters of contemporaries; and, lastly, characters that he has come to know about at school or in his private reading. A large number of girls (26 per cent.) idealise male characters. The author appends a few pedagogical suggestions.] Recueil de faits: Documents et discussion. **E. Claparède.** 'IIIme Congrès allemand de Psychologie expérimentale, Francfort, 22-25 Avril, 1908.' Bibliographie.

Revue de Philosophie. 1er Novembre, 1908. **P. Geny.** 'Position of the Problem of Knowledge.' [The paralogism of the word Con-

sciousness the foundation of subjective idealism.] **Domet de Vorges.** 'How do we get the idea of Object?' ["Not from any of the senses, but from the intellect, which comes in upon sensory appearances and seizes upon the solid foundation to which those appearances owe their reality." "We get the idea of Being by abstraction from our earliest knowledge, which is that there are bodies."] **G. Fonsegrive.** 'Certitude and Truth.' [Social character of truth. Relativity of Knowledge. Theory of Assimilation, resting on the principle of Causality and the principle of Likeness of effect to cause. An able article.] **P. Duhem.** 'Absolute and Relative Motion.' [Copernicus.] **H. Trouche.** 'M. Bergson's *L'Évolution Créatrice*.' [An acute and amusing criticism.] 1er Décembre, 1908. **F. Chovet.** 'Relations of Induction to Deduction.' [That in Induction the particular instances observed are taken as a type expressive of a common nature: "consequently the passage from particular to general is anterior and not posterior to experience, since at the outset we consider the elements of this experience as representing the entire species: and we may conclude with Claude Bernard that the mind of man functions always in the same way, by syllogism—or rather by deduction, for there is a further question whether deductive reasoning assumes always the syllogistic form".] **G. Fonsegrive.** 'Certitude and Truth.' [We have certain knowledge of our own causative minds and wills, also of our own bodies, and thereby of the bodies of other men, whereof we have a better objective cognition than we can have of brute matter. Kant is victorious over all who hold, with Descartes, ideas antecedent to experience. A deeply thought-out paper.] **E. Peillaube.** 'Reproduction of Memories.' [Synopsy: curious cases of association of sounds with colours.] **P. Duhem.** 'Absolute and Relative Movement.' [Descartes, Newton, theory of the body Alpha, the ideal fixed centre of the universe, by reference to which all motion is ultimately measured.] **P. Rousselot.** 'The Intellectualism of St. Thomas.' [Book reviewed.] 1 Janvier, 1909. **G. Fonsegrive.** 'Certitude and Truth.' ["The argument of St. Anselm and Descartes is not and cannot be aught else than a paralogism. In a concept, as such, we shall find always a concept only, and not a being. We shall not find God in any inward experience. We find God only on condition of going beyond ourselves. The one intellectual datum which enables us to do that, is the principle of causality. To give being, a cause must itself possess it by nature. This cause is God. One world, and one God."] **P. Beaupuy.** 'Psychology of Thought.' ["Thought is tendency inasmuch as that tendency is conscious."] **S. Belmond.** 'Transcendent Being according to the mind of Duns Scotus.' ["In the thought of Duns Scotus, God is the Transcendent Being in this sense, that He is beyond and above all categories of Being, all genera and all species: this absolute transcendence, however, does not exclude, conceptually, a certain univocal use of the term Being as applied to God and creatures."] **A. Farges.** 'Summary of Philosophic Modernism.' [Modernism is essentially a philosophy, and that philosophy is Evolutionist Monism.] 1er Fevrier, 1909. **Dr. Goix.** 'Fasting one Aspect of Mysticism.' [The fasts of St. Rose of Lima.] **P. Duhem.** 'Absolute and Relative Movement.' [Is movement a succession of distinct states or a continuous being, *forma fluens?*] **H. Léard.** 'The Third International Congress of Philosophy at Heidelberg.' [Summary of proceedings.]

Revue Neo-Scolastique. Novembre, 1908. **P. Mansion.** 'Gauss *versus* Kant on Non-Euclidian Geometry.' [Kant's view of Space is mathematically untenable.] **M. de Wulf.** 'The Philosophical Movement in Belgium.' **H. Hoffmans.** 'The Genesis of Sensations accord-

ing to Roger Bacon.' ["To Roger Bacon belongs the honour of having been the first to declare war on the theory of *species* so dear to his epoch."] **S. Deploige.** 'The Conflict of Moral Science with Sociology.' [The real conflict is between Sociology and the Moral Science, such as it was, of J. J. Rousseau. "Of man, Rousseau knows next to nothing; of society, still less. He proclaims man good and reasonable, and takes his passions of the moment for natural rights." His system "is the triumph of artificialism," in the teeth of history. Reaction of de Maistre and Comte against Rousseau.] **L. Noël.** 'At the Congress of Heidelberg.'

Revue de Métaphysique et de Morale. 16e Année, No. 6, Novembre, 1908. Contains as *Mémoires* the contributions of French philosophers to the Third International Congress of Philosophy at Heidelberg, 31st August to 5th September, 1908, and a *Compte rendu des Sections et des Séances générales*. This is a bulky number of 380 pages of great interest and value. The *Supplément* contains: Nécrologie: F. Paulsen; Livres Nouveaux, etc. 17e Année, No. 1, Janvier, 1909. 'Correspondance inédite de Ch. Renouvier et de Ch. Secrétan.' **F. Rauh.** 'L'expérience morale.' [Preface to the Second Edition of his work of that name, just published.] **Ch. Andler.** 'Le premier système de Nietzsche ou philosophie de l'illusion' [Importance of Nietzsche's æsthetic ideals for his subsequent doctrine.] Études Critiques: **H. Micault,** 'Sur de récents travaux de philosophie physique d'Abel Rey.' Enseignment: **L. Dugas,** 'Psychologie et pédagogie ou science et art. Questions pratiques: Conditions d'une doctrine morale éducative' (suite). Supplement: Livres Nouveaux; Revues et Périodiques.

Zeitschrift für Psychologie. Bd. xlviii., Heft 3 und 4. **C. F. Weigand.** 'Untersuchungen über die Bedeutung der Gestaltqualität für die Erkennung von Wörtern.' [(1) Words slowly moved in from a distance at which they are unrecognisable, are cognised not so much by their general form as by certain peculiarities of detail. These details may be subjectively seen and subjectively localised; obscurely seen and objectively localised; objectively localised and subjectively interpreted; objectively localised and objectively interpreted; or objectively cognised and visually identified. Total word-form plays, on the other hand, a large part in the recognition of known words. (2) Messmer's tachistoscopic types are invalid. By variation of conditions, an objective observer may be made to give results of the subjective type and conversely. The main factor is the attitude of attention, which may be concentrated at the point of fixation or diffused over a wide field. (3) In tachistoscopic experiments, in which the exposed word is immediately replaced by a post-exposure word, the acoustic-motor word-image may be effective at a point where no single letter of the exposed word has been identified. Reproduction is initiated, nevertheless, primarily by letters and only secondarily by total word-form.] **W. Hellpach.** 'Unbewusstes oder Wechselwirkung. Eine Untersuchung über die Denkmöglichkeit der psychologischen Deutungsprinzipien.—I.' [The 'unconscious' may mean any one of eight things: the not-remembered, the unpurposed, the unremarked, the mechanised, the reproducable, the mentally productive or creative, the psychically real, and the absolute. The first three uses are descriptive and may be discarded. The last three are interpretative and must be examined. The middle two are mixed, interpretatively descriptive.] **P. von Liebermann und G. Revesz.** 'Über Orthosymphonie. Beitrag zur Kenntnis des Falschhörens.' [Cases of paracousis,

in which the misheard single tones are rightly heard in combination. Beats are determined by the objective pitch, as in normal hearing; subjective analysis of the (correctly heard) interval gives components of the pitch at which they are heard singly, *i.e.*, may give pseudotones; the degree of consonance of the interval remains unaffected by analysis, *i.e.*, by the occurrence of (singly heard) pseudotones.] Literaturbericht. Dritter internationaler Kongress für Philosophie, Heidelberg, 31 August bis 5, September, 1908. Bd. xlviii., Heft 5 und 6. **W. Hellpach.** 'Unbewusstes oder Wechselwirkung. Eine Untersuchung über die Denkmöglichkeit der psychologischen Deutungsprinzipien.—III.' [The assumption of an unconscious necessarily takes us beyond the sphere of experience or knowledge. Nevertheless, it may be transformed into a scientific theory, either by way of analogy (Freud) or by way of metaphysics (von Hartmann). Both courses have their dangers. Shall we then reject the unconscious outright? If we do, we meet the difficulty that mind cannot be explained from consciousness alone: something more is necessary. The explanation of psychical by physical, of mind by body, does not help us; indeed, it does away with psychology altogether, and leaves the psychical a sheer riddle, a causeless and effectless concomitant of a part of the physical. What of the principle of parallelism? It, again, does not help us; for either it explains mind by body, or (if it holds to the independence of the psychical) it must supplement consciousness by the unconscious, and explain in terms of this latter. A consistent parallelism, that rejects the unconscious, is simply an interactionism couched in misleading terms. So we are left with the alternative that gives its title to the present inquiry: the unconscious or interaction? Only, we must remember that the issue takes the form of an alternative merely when parallelism is in question: for a psychology that is freed from the historical shackles of parallelism it may prove more useful, as in the case of biology and history, to combine interactionism with the doctrine of an unconscious.] **S. Alrutz.** 'Die Funktion der Temperatursinne in warmen Bädern. Anhang zu den "Untersuchungen über die Temperatursinne". Bd xlvii., S 161 u. 241.' [Determination of the *RL* of the sensation of heat for warm water (baths), with various cutaneous temperatures; discussion of the bearing of these results upon hydrotherapeutics (affective tone, shock, action on the nerves of warmth and cold); formulation of further problems.] **T. J. de Boer.** 'Zur gegenseitigen Wortassoziation.' [The frequency of association of correlated terms depends upon the order of their occurrence in linguistic usage; normal or forward association stands to backward association in the ratio of 1·5 : 1·0. The association of numerals is not without exception in the forward direction. Both results modify statements of Thumb and Marbe.] **E. Becher.** 'Energieerhaltung und psychologische Wechselwirkung. Ein Nachtrag zu meinem Aufsatz in Bd. xlvi. dieser Zeitschrift und eine Erwiderung auf Einwände.' [Elaboration of certain points of the previous argument, in reply especially to A. Müller and Köhler. Proof of the theorem that the postulate of the law of conservation of energy does not of itself univocally determine the course of events in any sort of isolated mechanical system. Nevertheless, the empirical confirmation of the law, while by help of hypotheses it may be reconciled with interactionism, speaks in favour of parallelism.] **O. Lipmann.** 'Eine Methode zur Vergleichung von zwei Kollektivgegenständen.' [Two similar series of results are ordinarily compared by determination of their average or median values. The author proposes to array the terms of the two series in order to determine the difference between every two corresponding terms, and then to take the median (plus or minus) of these differences as the representative

value required. The average deviation of the differences (again determined as median) from the representative value furnishes a measure of reliability.] Literaturbericht. **N. Stuecker.** 'Erwiderung.' **E. von Hornbostel.** 'Duplik.' [Discussion of Stücker's article on the D. S. for tonal pitch, published in the *Proceedings of the Vienna Academy*, 1907.] **H. Ebbinghaus.** 'Erwiderung.' **G. Martius.** 'Bemerkung zu vorstehender Erwiderung.' [Discussion of Ebbinghaus' psychology of art, as outlined in his *Abriss d. Psychologie.*] Bd. xlix., Heft 1 und 2. **R. Hennig.** 'Beiträge zur Psychologie des Doppel-Ichs.' [A long and somewhat rambling account, with many quotations from the casuistic literature, of the facts of double and multiple personality and of kindred phenomena: trance-speech, automatic writing, glossolalia, the solution of problems in dreams, the 'inspiration' of the constructive thinker, the ecstasy of the mystics, intoxication, etc. The author's aim appears to be the paralleling of the abnormal or 'occult' by occurrences that admittedly characterise the normal mental life. The parallels are often happy: but the explanatory suggestions (double personality, *e.g.*, depends on the alternating activity of the two halves of the brain) are for the most part superficial.] **E. von Aster.** 'Die psychologische Beobachtung und experimentelle Untersuchungen von Denkvorgängen.' [A critique of the experimental work which began with Marbe and culminates with Bühler. The advocates of a unique and irreducible thought-element have confused description (*Beschreibung*) with information (*Kundgabe*) or, in Dürr's language, with expression (*Ausdruck*). The phenomenological problem, however, is precisely that of description; the object of the *Ausfragemethode*, in psychological regard, is to bring out introspective details as to the constitution of thought, its nature as conscious experience, and not to determine what the observer was thinking about. The writer's descriptive analysis leads him to a threefold classification of the conscious experiences involved. We have (1) affectively toned sets or trends of consciousness (*Bewusstseinslagen*), 'states' of mind (*zuständliche Erlebnisstrecken*), which may be either directly or emphatically experienced; (2) feelings of transition, the direct impression of sameness, difference, relatedness; and (3) ideational elements, often of a residual kind, and often closely compacted with the verbal perception. These introspectively verifiable processes, supplemented by the Lippsian unconscious (which may, of course, be read by psychologists of other schools as physiological or psycho-physical disposition), are apparently adequate to the facts of observation. Systematically, the *Bewusstseinslage* is to be classed with feeling, and therefore to be set over against sensation and idea.] **A. Aall.** 'Über den Mass-stab beim Tiefensehen in Doppelbildern. Bathoskopische Untersuchungen, mit einer Figur.—I.' [The paper opens with a brief characterisation of the nativistic and empiristic (genetic) theories of space perception. It is shown that the localisation of double images offers a sort of *experimentum crucis* in the controversy between Wundt and Hering; for we may ask, first, which of the two theorists is right in point of fact, and secondly which of the two theories satisfies the facts when we have them. After a brief review of previous work, the writer outlines his own problem.] Literaturbericht. **M. Ettlinger.** 'Tierpsychologie. Sammelbericht.' [The first attempt made by the *Zeitschrift* in this direction. The list of works reviewed is oddly defective, but the Editor makes an express request for books and articles dealing with animal psychology.] Bd. xlix., Heft 3 und 4. **A. Aall.** 'Über den Mass-stab beim Tiefensehen in Doppelbildern. Bathoskopische Untersuchungen, mit einer Figur.—II.' [Description of apparatus and report of experiments. If secondary criteria are ruled out, the adjustment of depth in monocular vision

depends upon angular magnitude; in binocular vision, on the other hand, it obeys a law that holds solely for the double retina, the same law that governs stereoscopy in the narrower sense. The subjective estimates cluster about a value that accords with the objectively correct distance. This result is found with the most various arrangements of the separate test-objects; in individual cases, with asymmetrical lines of regard, the deviation from objective correctness is minimal; there is a fairly constant error of overestimation of distances represented on the temporal halves of the two retinas; there is progressive underestimation, as the test-objects which limit the one distance are represented farther and farther from the centre of the retina. The basis of this estimation of depth is a direct sense-impression. The third dimension is a sensory content, due to the simultaneous and homogenous stimulation of cross-disparate elements of the retina of the double eye. The experiments prove for depth-estimation by double images what Heine and Kothe have shown for stereoscopy in the strict meaning of the term: that disparation is better evaluated when the observer knows that he is dealing with a comparatively large absolute distance.] **K. Marbe.** 'Über die Verwendung russender Flammen in der Psychologie in deren Grenzgebieten.' [Discusses the use of sooty flames in registering the melody of speech and the heart-tone in various physical and electro-technical experiments, and in chronographic work.] **B. Eggert.** 'Untersuchungen über Sprachmelodie.' [Experiments with Marbe's sooty-flame apparatus, prompted by Sievers' statement that an author's style embodies a characteristic speech-melody. The tests prove that the soot-records can be quantitatively evaluated, and indicate laws of uniform recurrence; farther than this the results do not go. Incidentally it is shown that Marbe's dynamic accent is in all probability a stress accent, and not (as Kruegar suggested) an accent compounded of pitch, duration, stress and clang-tint.] **G. Saling.** 'Assoziative Massenversuche.' [Class results and demonstrations concerning most frequent verbal associations. The author shows that many associations interpreted by Gross and Wertheimer as complex-reactions cannot be turned to account for tests of criminals, and remarks in general that the association-test can never of itself be more than indicative. The paper ends with the first beginnings of a dictionary of verbal associations, and with some instances of contamination.] **J. Plassmann.** 'Astronomie und Psychologie.' [An appeal to psycho-physicists to utilise the materials ready to their hands in various fields of astronomical investigation. The classification of the stars by Argelander's method has been turned to general psycho-physical account; not so the estimation-curves of variable stars; the influence of conditions of illumination, of nearness to the limen, of colour; the sudden changes, independent of practice, in the standard of the observers; the tendency to overestimate small and overestimate large differences; the influence of hour-angle, of change of latitude; the preference for certain tenths, etc.] **O. Lipmann.** 'Ein neuer Expositions-Apparat mit ruckweiser Rotation für Gedächtnis- und Lern-Versuche.' [Improved form of the instrument described in 1904 (*Zeits.*, xxxv.). The cost (Mk. 300) is moderate; and the running is said to be practically noiseless. It is difficult to judge of an apparatus from description, but it appears that this piece will be a formidable rival to the *Neue Rotationsapparat mit ruckweiser Bewegung* (Mk. 350) of Spindler and Hoyer. The latter, however, admits also of continuous rotation of the drum.] Literaturbericht. Bd. xlix., Heft 5. **E. Duerr.** 'Über die experimentelle Untersuchung der Denkvorgaenge.' [Critique of Buehler and Wundt. (1) Buehler's method is unsuited to give knowledge of the essential nature of thought in psychological regard. His

observers reported things about their thoughts, but did not describe these thoughts as conscious contents. The distinction of intention and qualitative determination as partial moments of a thought rests largely upon a metaphysical basis. The distinction of types of thought must also be adjudged psychologically unfounded. What we find in experience is simply the (simple or complex) intention. (2) There is in idea something more than sensation, namely the 'relational consciousness,' which shows itself in our apprehension of space, time, likeness, difference, identity, unity, substance, attribute, change. This 'something more,' analysed out from the idea, gives us the essence of abstract thought. (3) Wundt's attack misses its mark, except that from the author's as from Wundt's standpoint it is advisable to experiment with material simpler than that used by Buehler. Wundt's own psychology of thought is not adequate.] **E. Becher.** 'Über die Sensibilität der inneren Organe.' [Continuation of the work begun by Meumann in the *Arch. f. d. ges. Psychol.*, 1907; experiments with a form of stomach pump, etc. The œsophagus is sensitive to pressure, warmth, cold, pain and electrical stimulation. There are great individual differences; sensitivity is in all respects less keen than that of the skin; localisation is fairly accurate; the sensations sometimes show a 'peculiar colouring'. The stomach and intestines are insensitive; sensations referred to them are set up in the skin and muscles of the abdomen. The larynx is sensitive; the bronchi are variably, the alveoli and lung substance doubtfully sensitive. Heart and arteries are apparently insensitive; veins are sensitive to pain. In general, the writer inclines to restrict sensitivity of any marked kind to peritoneum, diaphragm, pleuræ and œsophagus.] Literaturbericht.

Archiv f. d. Gesamte Psychologie. Bd. xiii., Heft 1 und 2. **W. Warstat.** 'Das Tragische. Eine psychologisch-kritische Untersuchung.' [Psychologically considered, the æsthetic attitude shows two stages: the purely æsthetic (the attitude of æsthetic enjoyment) and the critically æsthetic. The former is characterised by the fact that its objective aspect, or ideational side, is perceived only, whereas its subjective aspect, the feeling, is apperceived. It follows from this that pure æsthetic pleasure is functional or formal pleasure; it depends, not on the quality of the idea, but on the subject's attitude to the feeling which attaches to the idea, *i.e.*, to the free and unimpeded course of this feeling itself. Three questions now present themselves: those of the quality of æsthetic feelings, of the mode of connexion of these feelings with the idea, and of the character of the idea itself. The first is answered by reference to the criterion of the purely æsthetic attitude. The second has been answered by appeal both to association and to empathy: it may be relegated to psychology. The third has a formal and a material answer: the idea must possess æsthetic actuality, inner consistency; and it must possess concreteness, affective value. How, now, does this analysis of the purely æsthetic attitude help us towards a theory of the tragic? Negatively, it affords a basis for the criticism of existing theories, the metaphysical, the Aristotelian (theories of subjective effect), and the affective (Volkelt, Lipps). Positively, it points us to the objective basis and the subjective differentia of the tragic. The objective basis of tragedy is a suffering fellow-man. Tragic feeling is composed of tragic suffering (which retains its pleasurable character, within the purely æsthetic attitude, as free and unimpeded feeling) and tragic fear (due to the objectively given antithesis of sufferer and cause of suffering); the latter appears, however, only in the trembling hesitancy of the resolution with which the feeling of the æsthetic subject takes the suffering upon itself.] **V. Benussi.** 'Zur experimentellen Analyse des

Zeitvergleichs.—II. Erwartungszeit und subjektive Zeitgrösse.' [With a well-marked interval between normal and variable times, and with expectation-periods of different length, the author finds the following results. With short times : (1) a long expectation-period lengthens the following time ; (2) the second member of a pair of times is shortened ; (3) the subjective difference between N and V is greater in the order NV. With long times : (1) the second member of a pair of times is lengthened ; (2) the relation $V < N$ increases the number of right judgments (Weber's Law). In this case there is no noticeable influence of length of expectation-period or of order of presentation of N and V, as in the former there is none of the relative magnitude of N and V. It appears, then, that whatever enhances the complex of limiting noises, or makes it more striking, sets up a tendency to subjective shortening of the time ; and that whatever throws into relief the temporal difference between these noises sets up a tendency to subjective lengthening.] Literaturbericht. **E. Duerr.** 'Erkenntnispsychologisches in der erkenntnistheoretischen Literatur der letzten Jahre.' **H. Keller.** 'Sammelreferat über die Neuerscheinungen der Akustik in den Jahren, 1903-1905.' Einzelbesprechung. [E. Bloch on L. W. Stern, Person und Sache : System der philosophischen Weltanschauung.—I. Ableitung und Grundlehre.] Referate.

Archiv für Systematische Philosophie. Band xiv., Heft 4. Dezember, 1908. **Vitalis Norström.** 'Naives und wissenschaftliches Weltbild' (suite). (See *Archiv. für S.P.* xiv. 4.) [The explanation of Personality through Nature must be supplemented by the explanation of Nature through Personality.] **Gustav Tichy.** 'Altruismus und Gerechtigkeit. [Justice a principle capable of taking the place occupied by Altruism in theoretical systems of morality.] **Emil Raff.** 'Über die Formen des Denkens.' [Discusses relation in perception of intuitive thought to abstraction. These are two functions of consciousness, but consciousness is simple if regard is had to originating perceptions. *In alternatione posita est duplicitas, in essentia unitas.*] **Georg Wendel.** 'Prolegomena.' [A glance over the main divisions of philosophy to ascertain the conditions under which a new philosophical system is possible, and the demands with which the great philosophical genius yet unborn must comply.] **David Koigen.** 'Jahresbericht über die Literatur zur Metaphysik.' Neuste Erscheinungen, Systematische Abhandlungen, Bücher.

Vierteljahrsschrift für Wissenschaftliche Philosophie und Soziologie. Neue Folge, vii., Heft iii., Oktober, 1908. **K. F. Wize.** 'Eine Einteilung der philosophischen Wissenschaften nach Aristoteles' Prinzipien.' [Æsthetics corresponds to unfettered Freedom ; Theoretical Philosophy to the scrutinising activity ; Practical Philosophy to the teleological activity.] **Ernst Lehmann.** 'Idee und Hypothese bei Kant.' [*Idee* characterises absolute totality, non-phenomenality, freedom, *Hypothese* requires simple constant elements in space and time to explain complex data. Kant's sharp distinction between the two justified.] **G. von Glasenapp.** 'Die Leviratsche, Eine soziologische Studie.' [Marriage of deceased husband's brother.] **Gerhard Hessenberg.** '"Persönliche" und "sachliche" Polemik.' [Discussion arising out of Cassirer's 'Kritische Idealismus'.] Besprechungen, etc. Neue Folge, vii., Heft iv. **Rich. Müller-Freienfels.** 'Die Bedeutung des Ästhetischen für die Ethik. [Art disturbs and emancipates emotion, and arouses specific interests, thus affecting the moral condition. Con-

sideration of special arts and problems, *e.g.*, the nude in art.] **Kuno Mittenzwey.** 'Der iii. internationale Philosophenkongress.' **Paul Barth.** 'Die Geschichte der Erziehung in soziologischer Beleuchtung VII.' [Renaissance and Reformation. Influence of Italian Humanism on Theory and Practice of Education.] Besprechungen, Zeitschriften, Bibliographie.

Rivista Filosofica. Anno x., vol. xi. Fasc. iv. September-October, 1908. **G. Gentile.** 'Il concetto della storia della filosofia.' [We must know what philosophy is before we can write its history. Gentile defines it in an Aristotelian sense, as the science of absolute Being. But modern thought since Descartes has ascertained the purely spiritual nature of Being. And it has also taught us to conceive spirit as essentially a process, a becoming. Thus the history of philosophy turns out to be philosophy itself. That is Hegel's view; but Gentile, improving on the master, goes on to identify philosophy with history in general. According to him, the movement of speculation initiates and determines every other movement.] **E. Lugaro.** 'La base anatomica dell' intuizione.' [Assuming without proof the fundamental positions of Spencerian associationism, *i.e.*, (i.) that belief means the simultaneous apprehension of two distinct concepts, (ii.) that this process is represented by corresponding modifications in the cerebral cortex, and (iii.) that such modifications are capable of becoming permanently fixed and transmitted by inheritance—Lugaro argues that intuitions, viewed on the physiological side, consist in the automatic cerebral registration of the common element in our most habitual experiences, the nervous processes which represent uniform connexions in the external world being more deeply impressed on the cortex than those which represent casual and changeable connexions.] **L. Snali.** 'Un trattato elementare di philosofia indiana (*contin. e fine*).' [Shows incidentally how the interest of controversies relating to the theory of knowledge in ancient India was heightened by their bearing on the dogma of Vedic inspiration.] **E. di Carlo.** 'Il concetto della natura ed il principio del diritto.' [A review of Prof. G. Del Vecchio's last work on the Philosophy of Law. Del Vecchio accepts the theory of Natural Rights, founding it—not very successfully, in his critic's opinion—on the transcendental idealism of Kant and his German followers.] **P. F. Nicoli.** 'La riforme della scuola media.' [Seems to advocate the retention of literature, and more especially Greek literature, as the basis of secondary education. Where Latin literature is taught, it should be brought into closer touch with philosophical culture.] **G. Vidari.** 'Terzo Congresso Filosofico Internazionale.' [The proceedings of the Heidelberg Congress seem to illustrate three important results of recent philosophical activity: (i.) the increasing influence of philosophy on science and history in the narrower sense; (ii.) the tendency to profit by what is helpful in Pragmatism without adopting the extreme conclusions of its advocates; and (iii.) the rising importance of the contributions to philosophy made by non-German nations.] Rassegna Bibliografice, etc.

IX.—NOTES.

MIND ASSOCIATION.

The annual meeting of the Mind Association will be held on Saturday 29th May at the University, Edmund St., Birmingham, at 4·30 P.M. This will be followed at 5·30 P.M. by a meeting of the Aristotelian Society, to which members of the Mind Association are invited and may bring friends. The papers on the subject—*Why Pluralism?* (by Messrs. J. H. Muirhead, F. C. S. Schiller and A. E. Taylor) will be taken as read, and will be sent to members of the Association, and also to their friends, on application to the Hon. Mr. H. W. Carr, Bury, Pulborough, Sussex. At 8 P.M. there will be a dinner for members of the two Societies in the University Club. Further particulars may be obtained from Prof. Muirhead, the University, Birmingham.

The following gentlemen have joined the Mind Association since the printing of the January number:—

Handyside, J., 3 Hatton Place, Edinburgh.

Hardie R. P., 13 Palmerston Road, Edinburgh.

MR. McTAGGART ON THE "UNREALITY OF TIME".

As Mr. McTaggart apparently intends to return to the subject of the Unreality of Time, it would of course be premature to offer observations on his whole position. But there is a point of view from which his arguments are seen to be distorted from the outset by what we may perhaps call a flaw in the glass through which we habitually observe and consider the whole subject of 'time'.

This was roughly indicated and outlined in my Article on Time as Derivative (Mind, vol. xvi, No. 63); though, as the subject still lacks adequate exposition and discussion, the position assumed could hardly expect to be definitely taken into account. From this position, however, the orientation of our idea of time is changed, its perspectives are altered, or more strictly, it comes under the category to which perspectives belong.

If the sense-percept of Motion and therefore change in Space was not prior to the idea of time and did not include, as having involved, it, our choice of terminology for its expression and definition would not be what it is. We should have an instinctive sense of incongruity, *e.g.*, in speaking of a "series of positions running from the far past through the near past to the present, and then from the present to the near future and the far future" (*n.b.*, the question as to how a series of positions can 'run' is a distinct one). As it is, we curiously ignore the obvious origin of the idea of 'past' from passed, 'present' from presented (here, 'in this place') and 'future' from 'yet to come,' to arrive.

When we admit that time involves change, may we not rather suggest that change shares with Motion and its implied Space wherein to move, the parentage of time, as movement through the space of experience in an irreversible direction?[1]

We may agree that "the relations of earlier and later are permanent". But why? Because they are questions of position. A day, an hour, is a

[1] The question of reversal seems as yet practically begged. There is at least one sense—that of reminiscence, recollection, record, rather than memory—in which time is already reversible.

marked off *area* of experience, and an event "never ceases to have a *place*". But to say that the timeless never changes can be true only in one sense and on one condition: that change does not suggest or evolve the idea of time, but is derived from and dependent on, time. A fixed lighthouse may begin by being barely seen on our horizon, may be passed and at last barely seen on another. This surely implies two kinds or modes of Space: (1) the static and (2) the kinetic. We may say that Change implies *room* wherein to change, and thus movement internal or external; movement also of object or of its standing-ground, in given directions. To this we add as an after-thought, and *time* wherein to change.

Thus change can only be "a change of the characteristics imparted to events by their presence in the A series" (of positions). Rather their presence in the A series is one of many results of the events as characteristic. Character is not temporal, neither is Presence: character is qualitative and presence spatial: while Events *take place*. So long as we ignore these facts which, as in so many cases, reveal themselves through age-long and involuntary tendencies of speech—some healthy and revealing some diseased or antiquated—it is no wonder that even a trained and able dialectician should have to own that "we cannot explain what is meant by past, present and future". For they are lent by space for the measurement, the placing, the direction of our successive triad of past, present and future. When we say "whenever we judge anything to exist in time, we are in error" we are right, because existence in this sense depends on motion in space only.

It is apparently a condition of present consciousness or 'mind' that it should be able to *remember*, to *reproduce* in 'idea' the space already traversed in experience, and again with rare and doubtful exceptions should be unable to predict, to *foresee* the inevitable 'other half' of our time-area and time-movement.

It looks as though this arbitrary blindness to what is coming, approaching, or what we are advancing into (significantly reversing, it may be noted, the main condition of highly organised life—the forward-reaching vision), has a special reason and office, which, when we have acquired in higher forms a significating power once strenuously operative but now to some extent suppressed, may be safely removed. At present some of the most precious attributes of mind, and among them that of indirect future-vision, by predictive analogy and the sense of consequence, of mental or logical result, seem to be due to the partial paralysis of outlook which the apparent irreversibility of 'time' involves. The very idea of creation or origin seems to depend on a non-reversible (or reverting) 'time'.

When we have proved ourselves worthier of the gift we call moral sense, and of the power of reading the needs of the 'future' through those of the past and present, we may find ourselves safely entrusted by Nature with eyes couched of that 'cataract' which as yet hides from us the vista of what is in front of us, while curiously enough we have eyes for that which is behind us.[1] At present there is no doubt that it would make for the loss of valuable qualities. We should become morbid 'fatalists'. Many interests of the highest concern would die down in us. To anticipate as we recollect would be, as we are, ruinous. But let us imagine a lack of *background*, of register, history, memory and record, as complete as the present lack of *forecast*, and then realise what we are losing by failure to become fit for the vision of the Future. The severe

[1] And then our suggestively ambiguous use of 'before,' as at once front and back of our position, will be accounted for, and the paradoxical contrast between physical and mental vision recognised and interpreted.

training now called that of science, which has so suddenly come about with effects on the race yet to be realised, may well be the first preparation for this. No strictness of discipline in the seeking of experimentally-purged fact can be too great as the Fore-seer's preliminary training. Else we should be intoxicated by the resumption of a normal heritage which for good reasons has been in abeyance.

We have, as it is, too many confident prophets who are dogmatically certain of the validity of their message because they have not yet learnt to allow for sources of error such as the misplacement of the Time-idea, which is in fact out of context and thus out of relation. All our theories (and refutations) of 'immortality' are utterly astray, diverted from their true line of advance by this initial dislocation of judgment. From this point of view, then, I venture to ask whether a flaw in the very first conditions of observation may not be vitiating all our discussions of that *room for experience* which we call time. .

As Mr. McTaggart's article and this comment both raise questions to be hereafter dealt with, nothing more need now be said. At present the difficulties seem entirely owing to the erection of Time, originally a convenient derivation or secondary product of Motion-space, into the rank of an original category.

V. Welby.

OBITUARY.

By the death of Emeritus-Professor Simon Sommerville Laurie, on 1st March, 1909, there has been lost to British philosophy a writer of rare intellectual courage, shrewd independence of judgment, and great speculative insight. Philosophy was the absorbing and unremitting occupation of his life, and was undertaken, as he used to say, simply to 'systematise his own experience'. He thought and wrote primarily for himself, and was not much interested in the promulgation of his views,—an attitude which reacted considerably on his style and manner of expounding his ideas. His earliest philosophical work was a volume on the *Philosophy of Ethics*, published so long ago as 1866 when he was thirty-six years of age. Another followed in 1868 on *Certain British Theories of Morals*. But it was in 1884 that he first took an original and independent place in the ranks of British philosophers with his *Metaphysica Nova et Vetusta*, followed a year later by the complementary volume, *Ethica, or the Ethics of Reason*. These books have been translated into French by an enthusiastic exponent of his views, Prof. G. Remacle of Hasselt. Prof. Laurie recast the theory developed in these two volumes, in a more comprehensive and more systematic form. The result of these further reflections was the production of the *Synthetica: being Meditations Epistemological and Ontological*, published in 1906.

In addition to articles contributed to philosophical journals, he wrote largely on the philosophy and history of education, and by this no doubt he is best known, not merely to the students who listened to his lectures during his occupancy of the Chair of Education in Edinburgh University, but to the wide circle of educationists abroad. One can see the reciprocal influence of educational theory on philosophical theory in *The Institutes of Education* (2nd ed., 1899), where he embodied his views on the fundamental principles of education.

His connexion with philosophy is naturally all that is relevant to this journal, and biographical information must therefore be omitted. But it is to be hoped that some one will be able to put on record Prof. Laurie's influence on the course of educational development in Scotland and give to a widely-interested public some account of a singularly attractive personality.

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—ON TRUTH AND COHERENCE.[1]

By F. H. Bradley.

The welcome article by the Editor in Mind, No. 65, contains, we shall all agree, much food for reflection. Profiting, I hope, by all of it, there is nevertheless much from which I am forced to dissent. And in what follows here I shall try to deal with one point of disagreement. We can, I trust, isolate this point, at least sufficiently for a separate discussion.

Prof. Stout denies, I understand, that coherence will work as a test of truth in the case of facts due to sensible perception and memory. Mr. Russell again has taken the same line in his interesting article on Truth in the Proceedings of the Aristotelian Society for 1907. This is the issue to which here I confine myself, neglecting the question as to other truths whose warrant also is taken as immediate. What I maintain is that in the case of facts of perception and memory the test which we do apply, and which we must apply, is that of system. I contend that this test works satisfactorily, and that no other test will work. And I argue in consequence that there are no judgments of sense which are in principle infallible.

There is a misunderstanding against which the reader must be warned most emphatically. The test which I advocate is the idea of a whole of knowledge as wide and as consistent as may be. In speaking of system I mean

[1] An article on Coherence and Contradiction will follow.

always the union of these two aspects, and this is the sense and the only sense in which I am defending coherence. If we separate coherence from what Prof. Stout calls comprehensiveness, then I agree that neither of these aspects of system will work by itself. How they are connected, and whether in the end we have one principle or two, is of course a difficult question. I hope to return to this, but it is impossible for me to touch on it here. All that I can do here is to point out that both of the above aspects are for me inseparably included in the idea of system, and that coherence apart from comprehensiveness is not for me the test of truth or reality.

So much being premised, I will proceed not to argue in detail against Prof. Stout and Mr. Russell, but to endeavour to explain the real nature of that view which I advocate. In speaking, however, of this common view as mine, I merely wish to indicate to the reader that I have no right to commit others to every detail of my case. For the sake of clearness let me begin by mentioning some things in which I do *not* believe. I do not believe in any knowledge which is independent of feeling and sensation. On sensation and feeling I am sure that we depend for the material of our knowledge. And as to the facts of perception, I am convinced that (to speak broadly) we cannot anticipate them or ever become independent of that which they give to us. And these facts of perception, I further agree, are at least in part irrational, so far as in detail is visible. I do not believe that we can make ourselves independent of these non-rational data.

But, if I do not believe all this, does it follow that I have to accept independent facts? Does it follow that perception and memory give me truths which I must take up and keep as they are given me, truths which in principle cannot be erroneous? This surely would be to pass from one false extreme to another. Our intelligence cannot construct the world of perceptions and feelings, and it depends on what is given—to so much I assent. But that there are given facts of perception which are independent and ultimate and above criticism, is not to my mind a true conclusion. On the contrary, such facts to my mind are a vicious abstraction. We have, I should say, the aspect of *datum*, and we have the aspect of interpretation or construction, or what Prof. Stout calls implication (p. 27). And why, I ask, for the intelligence must there be *datum* without interpretation any more than interpretation without *datum?* To me the opposite holds good, and I therefore conclude that no given fact is sacrosanct. With every fact of perception or memory a modified inter-

pretation is in principle possible, and no such fact therefore is given free from all possibility of error.

The reason for maintaining independent facts and infallible judgments, as I understand it, is twofold. (1) Such data, it may be said, can be actually shown. And (2) in any case they must exist since without them the intelligence cannot work. Prof. Stout is identified,[1] I think, only with the second of these contentions.

(1) I doubt my ability to do justice to the position of the man who claims to show ultimate given facts exempt from all possible error. In the case of any datum of sensation or feeling to prove that we have this wholly unmodified by what is called "apperception" seems a hopeless undertaking. And how far it is supposed that such a negative can be proved I do not know. What, however, is meant must be this, that we somehow and somewhere have verifiable facts of perception and memory, and judgments free from all chance of error.

I will begin here by recalling a truth familiar but often forgotten, a truth of which Prof. Stout does not fail to remind us. In your search for independent facts and for infallible truths you may go so low that, when you have descended beyond the level of error, you find yourself below the level of any fact or of any truth which you can use. What you seek is particular facts of perception or memory, but what you get may be something not answering to that character. I will go on to give instances of what I mean, and I think that in every case we shall do well to ask this question, 'What on the strength of our ultimate fact are we able to contradict?'

(*a*) If we take the instance of simple unrelated sensations or feelings, *a*, *b*, *c*—supposing that there are such things—what judgment would such a fact enable us to deny? We could on the strength of this fact deny the denial that *a*, *b* or *c* exist in any way, manner or sense. But surely this is not the kind of independent fact of which we are in search.

(*b*) From this let us pass to the case of a complex feeling containing, at once and together, both *a* and *b*. On the ground of this we can deny the statement that *a* and *b* cannot or do not ever anyhow co-exist in feeling. This is an advance, but it surely leaves us far short of our goal.

(*c*) What we want, I presume, is something that at once is infallible and that also can be called a particular fact of perception or memory. And we want, in the case of per-

[1] MIND, No. 65, p. 28.

ception, something that would be called a fact for observation. We do not seem to reach this fact until we arrive somewhere about the level of "I am here and now having a sensation or complex of sensations of such or such a kind". The goal is reached, but at this point, unfortunately, the judgment has become fallible, so far at least as it really states particular truth.

(*a*) In such a judgment it is in the first place hard to say what is meant by the 'I'. If, however, we go beyond feeling far enough to mean a self with such or such a real existence in time, then memory is involved, and the judgment at once, I should urge, becomes fallible (*cf.* MIND, N.S., No. 35, p. 16, and No. 66, p. 156). Thus the statement made in the judgment is liable to error, or else the statement does not convey particular truth.

(*β*) And this fatal dilemma holds good when applied to the "now" and "here". If these phrases mean a certain special place in a certain special series or order, they are liable to mistake. But, if they fall short of this meaning, then they fail to state individual fact. My feeling is, I agree, not subject to error in the proper sense of that term, but on the other side my feeling does not of itself deliver truth. And the process which gets from it a deliverance as to individual fact is fallible.

Everywhere such fact depends on construction. And we have here to face not only the possibility of what would commonly be called mistaken interpretation. We have in addition the chance of actual sense-hallucination And, worse than this, we have the far-reaching influence of abnormal suggestion and morbid fixed idea. This influence may stop short of hallucination, and yet may vitiate the memory and the judgment to such an extent that there remains no practical difference between idea and perceived fact. And, in the face of these possibilities, it seems idle to speak of perceptions and memories secure from all chance of error. Or on the other side banish the chance of error, and with what are you left? You then have something which (as we have seen) goes no further than to warrant the assertion that such and such elements can and do co-exist—somehow and somewhere, or again that such or such a judgment happens—without any regard to its truth and without any specification of its psychical context. And no one surely will contend that with this we have particular fact.

The doctrine that perception gives us infallible truth rests on a foundation which in part is sound and in part fatally defective. That what is felt is felt, and cannot, so far as felt,

be mistaken—so much as this must be accepted. But the view that, when I say 'this,' 'now,' 'here,' or 'my,' what I feel, when so speaking, is carried over intact into my judgment, and that my judgment in consequence is exempt from error—seems wholly indefensible. It survives, I venture to think, only because it never has understood its complete refutation.[1] That which I designate, is not and cannot be carried over into my judgment. The judgment may in a sense answer to that which I feel, but none the less it fails to contain and to convey my feeling. And on the other hand so far as it succeeds in expressing my meaning, the judgment does this in a way which makes it liable to error. Or, to put it otherwise, the perceived truth, to be of any use, must be particularised. So far as it is stated in a general form, it contains not only that which you meant to say but also and just as much the opposite of that which you meant. And to contend for the infallibility of such a truth seems futile. On the other side so far as your truth really is individualised, so far as it is placed in a special construction and vitally related to its context, to the same extent the element of interpretation or implication is added. And, with this element, obviously comes the possibility of mistake. And we have seen above that, viewed psychologically, particular judgments of perception immune from all chance of error seem hardly tenable.

(2) I pass now to the second reason for accepting infallible data of perception. Even if we cannot show these (it is urged) we are bound to assume them. For in the absence of these our knowledge has nothing on which to stand, and this want of support results in total scepticism.

It is possible of course here to embrace both premisses and conclusion, and to argue that scepticism is to be preferred to an untrue assumption. And such a position I would press on the notice of those who uphold infallible judgments of sense and memory. But personally I am hardly concerned in this issue, for I reject both the conclusion and the premisses together. Such infallible and incorrigible judgments are really not required for our knowledge, and, since they cannot be shown, we must not say that they exist.

In maintaining that all sense-judgments are liable to error it would be better no doubt first to discuss the nature of error. But, since this is impossible here, let me state how

[1] I am of course referring here to Hegel. This is a matter to which I hope before long to return. I am naturally not attempting to deal here with the whole subject of Error.

much I take to be admitted or agreed on. I understand it to be admitted that some judgments of perception are fallible, and that the question is simply whether this description applies to all such judgments without exception. But, if some at least of these judgments are to be called fallible, what are we to understand by that word? We each of us have a world which we call our "real" world in space and time. This is an order, how made and based on what, it is impossible here to enquire. But facts of sense are called imaginary or erroneous, when in their offered character they do not belong to this "real" order in space or time. They all belong to it of course as facts in some one's mental history, but otherwise they do not qualify the "real" order as they claim to qualify it. We therefore relegate them to the sphere of the erroneous or the imaginary, unless we are able to modify and correct their claim so that it becomes admissible. So much as this I must take here to be admitted on both sides, though it is more than possible, I fear, that I may have thus unknowingly perverted the issue. Still, unless the question by some means is cleared, I see no way of proceeding. And the issue, as I understand it, will now be as follows. Are there any judgments of perception or memory, purporting to qualify the "real" world, which must necessarily qualify that world as they purport to qualify it? Or on the other hand are all such "facts" capable in principle of being relegated to the world of error, unless and until they are corrected?

This I take to be the issue, but there is a distinction which before proceeding the reader must notice, the distinction between *my* experience and *my* world and the world in general. It is one thing to say that there are truths which in and for my personal experience are fundamental and incorrigible, and it is another thing to assert that the same truths are infallible absolutely. This distinction will become clearer as we advance, for I will begin by confining the question to my personal experience. Is there any truth of perception which here is fundamental and infallible, and incapable of being banished to the world of fancy?

I agree that we depend vitally on the sense-world, that our material comes from it, and that apart from it knowledge could not begin. To this world, I agree, we have for ever to return, not only to gain new matter but to confirm and maintain the old. I agree that to impose order from without on sheer disorder would be wholly impracticable, and that, if my sense-world were disorderly beyond a certain point, my intelligence would not exist. And further I agree

that we cannot suppose it possible that *all* the judgments of perception and memory which for me come first, could in fact for me be corrected. I cannot, that is, imagine the world of my experience to be so modified, that in the end none of these accepted facts should be left standing. But so far, I hasten to add, we have not yet come to the real issue. There is still a chasm between such admissions and the conclusion that there are judgments of sense which possess truth absolute and infallible.

We meet here a false doctrine largely due to a misleading metaphor. My known world is taken to be a construction built upon such and such foundations. It is argued, therefore, to be in principle a superstructure which rests upon these supports. You can go on adding to it no doubt, but only so long as the supports remain; and, unless they remain, the whole building comes down. But the doctrine, I have to contend, is untenable, and the metaphor ruinously inapplicable. The foundation in truth is provisional merely. In order to begin my construction I take the foundation as absolute—so much certainly is true. But that my construction continues to rest on the beginnings of my knowledge is a conclusion which does not follow. It does not follow that, if these are allowed to be fallible, the whole building collapses. For it is in another sense that my world rests upon the data of perception.

My experience is solid, not so far as it is a superstructure but so far as in short it is a system.[1] My object is to have a world as comprehensive and coherent as possible, and in order to attain this object I have not only to reflect but perpetually to have recourse to the materials of sense. I must go to this source both to verify the matter which is old and also to increase it by what is new. And in this way I must depend upon the judgments of perception. Now it is agreed that, if I am to have an orderly world, I cannot possibly accept all "facts". Some of these must be relegated, as they are, to the world of error, whether we succeed or fail in modifying and correcting them. And the view which I advocate takes them all as in principle fallible. On the other hand, that view denies that there is any necessity

[1] I would venture here in passing to question in principle the truth of a thesis advanced by Prof. Stout (pp. 34-5). Prof. Stout maintains that a proposition may be guaranteed by other propositions, and yet itself lend these no support. But if any proposition has a consequence which is not discordant with what we already know, this consequence is surely, so far as it goes, a support, however small, to the proposition from which it follows. I however agree that the amount of such support may be trifling.

for absolute facts of sense. Facts for it are true, we may say, just so far as they work, just so far as they contribute to the order of experience. If by taking certain judgments of perception as true, I can get more system into my world, then these "facts" are so far true, and if by taking certain "facts" as errors I can order my experience better, then so far these "facts" are errors. And there is no "fact" which possesses an absolute right. Certainly there are truths with which I begin and which I personally never have to discard, and which therefore remain in fact as members of my known world. And of some of these certainly it may be said that without them I should not know how to order my knowledge. But it is quite another thing to maintain that all and every single one of these judgments is in principle infallible. The absolute indispensable fact is in my view the mere creature of false theory. Facts are valid so far as when taken otherwise than as "real," they bring disorder into my world. And there are to-day for me facts such that, if I take them as mistakes, my known world is damaged and, it is possible, ruined. But how does it follow that I cannot to-morrow on the strength of new facts gain a wider order in which these old facts can take a place as errors? The supposition may be improbable, but what you have got to show is that it is in principle impossible.[1] A foundation used at the beginning does not in short mean something fundamental at the end, and there is no single "fact" which in the end can be called fundamental absolutely. It is all a question of relative contribution to my known world-order.

"Then no judgment of perception will be more than probable"? Certainly that is my contention. "Facts" are justified because and as far as, while taking them as real, I am better able to deal with the incoming new "facts" and in general to make my world wider and more harmonious. The higher and wider my structure, and the more that any particular fact or set of facts is implied in that structure, the more certain are the structure and the facts. And, if we could reach an all-embracing ordered whole, then our certainty would be absolute. But, since we cannot do this, we have to remain content with relative probability. Why is this or that fact of observation taken as practically certain? It is so taken just so far as it is *not* taken in its own right. (i.) Its validity is due to such and such a person perceiving it under such and such conditions. This means

[1] A possible attempt to do this will be discussed towards the close of the article.

that a certain intellectual order in the person is necessary as a basis, and again that nothing in the way of sensible or mental distortion intervenes between this order and what is given. And (ii.) the observed fact must agree with our world as already arranged, or at least must not upset this. If the fact is too much contrary to our arranged world we provisionally reject it. We eventually accept the fact only when after confirmation the hypothesis of its error becomes still more ruinous. We are forced then more or less to rearrange our world, and more or less perhaps to reject some previous "facts".[1] The question throughout is as to what is better or worse for our order as a whole.

Why again to me is a remembered fact certain, supposing that it is so? Assuredly not because it is infallibly delivered by the faculty of Memory, but because I do not see how to reconcile the fact of its error with my accepted world. Unless I go on the principle of trusting my memory, apart from any special reason to the contrary, I cannot order my world so well, if indeed I can order it at all. The principle here again is system (*cf.* MIND, Nos. 35, 66).

The same account holds with regard to the facts of history. For instance, the guillotining of Louis XVI. is practically certain, because, to take this as error, would entail too much disturbance of my world. Error is possible here of course. Fresh facts conceivably might come before me such as would compel me to modify in part my knowledge as so far arranged. And in this modified arrangement the execution of Louis would find its place as an error. But the reason for such a modification would have to be considerable, while, as things are, no reason exists. And take again the case of a historical fact which is called more or less isolated. Mr. Russell[2] has instanced the honourable death of a late prelate, and has urged (as I understand) that on any view such as mine I have just as much reason to believe that this prelate was hanged. The fact is supposed to be isolated, and on mere internal evidence either alternative is taken, I presume, as equally probable. Now, of course I agree that we have innumerable cases where on mere internal evidence we are unable to distinguish between fact and fancy, but the difficulty that is supposed to arise I am unable to see. For the criterion with me is not mere absence within the limits of this or that idea of visible discrepancy. The question with me everywhere is as to what is the result to my real world. (*Appearance*, chap. xvi., and p.

[1] *Cf. Appearance*, p. 543, note.
[2] *On the Nature of Truth*, pp. 33, 35.

618.) Now, confining myself to a certain case, the acceptance on the one side of the mere fancy or on the other side of the attested fact may, so far as I see, be in itself the same thing to my world. But imagine my world made on the principle of in such a case accepting mere fancy as fact. Would such a world be *more* comprehensive and coherent than the world as now arranged? Would it be coherent at all? Mr. Russell, I understand, answers in the affirmative (p. 33), but it seems to me that he has misconceived the position. To take memory as in general trustworthy, where I have no special reason for doubt, and to take the testimony of those persons, whom I suppose to view the world as I view it, as being true, apart from special reason on the other side—these are principles by which I construct my ordered world such as it is. And because by any other method the result is worse, therefore for me these principles are true. On the other hand to suppose that any "fact" of perception or memory is so certain that no possible experience could justify me in taking it as error, seems to me injurious if not ruinous. On such a principle my world of knowledge would be ordered worse, if indeed it could be ordered at all. For to accept all the "facts," as they offer themselves, seems obviously impossible; and, if it is we who have to decide as to which facts are infallible, then I ask how we are to decide. The ground of validity, I maintain, consists in successful contribution. That is a principle of order, while any other principle, so far as I see, leads to chaos.[1]

"But," it may still be objected, "my fancy is unlimited. I can therefore invent an imaginary world even more orderly than my known world. And further this fanciful arrangement might possibly be made so wide that the world of perception would become for me in comparison small and inconsiderable. Hence, my perceived world, so far as not supporting my fancied arrangement, might be included within it as error. Such a consequence would or might lead to confusion in theory and to disaster in practice. And yet the result follows from your view inevitably, unless after all you fall back upon the certainty of perception."

To this possible objection, I should reply first, that it has probably failed to understand rightly the criterion which I

[1] To the question if the above principle is merely "practical," I reply "Certainly, if you take 'practice' so widely as to remove the distinction between practice and theory". But, since such a widening of sense seems to serve no useful purpose, I cannot regard that course as being itself very "practical". I answer therefore that the above principle is certainly not merely practical.

defend. The aspect of comprehensiveness has not received here its due emphasis. The idea of system demands the inclusion of all possible material. Not only must you include everything to be gained from immediate experience and perception, but you must also be ready to act on the same principle with regard to fancy. But this means that you cannot confine yourself within the limits of this or that fancied world, as suits your pleasure or private convenience. You are bound also, so far as is possible, to recognise and to include the opposite fancy.

This consideration to my mind ruins the above hypothesis on which the objection was based. The fancied arrangement not only has opposed to it the world of perception. It also has against it any opposite arrangement and any contrary fact which I can fancy. And, so far as I can judge, these contrary fancies will balance the first. Nothing, therefore, will be left to outweigh the world as perceived, and the imaginary hypothesis will be condemned by our criterion.

And, with regard to the world as perceived, we must remember that my power is very limited. I cannot add to this world at discretion and at my pleasure create new and opposite material. Hence, to speak broadly, the material here is given and compulsory, and the production of what is contrary is out of my power. After all due reservations had been made, the contrast in this respect between the worlds of "fact" and of fancy will hold good. You cannot, as with fancies, make facts one to balance another at your pleasure. And (if we are to go still further) the riches of imagination even as regards quantity are deceptive. What we call our real world is so superior in wealth of detail that to include it, as outweighed in quantity, within some arrangement which we merely fancy, is to my mind not feasible. The whole hypothesis, which we have considered, seems to have been shown on more than one ground to be untenable.

But if I am asked, "were it otherwise, what becomes of your criterion?" though I think the question unfair, I will answer it conditionally. In that supposed case I would modify my criterion. I would say "The truth is that which enables us to order most coherently and comprehensively the data supplied by immediate experience and the intuitive judgments of perception".[1] But this answer, I repeat, is

[1] As I am not committed to this answer, I can hardly be called on to explain it further. But I may remind the reader that immediate experience and perceptional judgment is not all of one kind. Æsthetic perceptions, for instance, will not fall under the head of mere fancies.

merely conditional, and I do not believe that the condition holds good. For I believe that our criterion, applied without modification, gives its proper place to mere fancy. And in any case (need I add?) it does not follow that particular judgments of perception and memory, all or any of them, are infallible.

But there is an objection which perhaps for some time has been troubling the reader. "After all" (he may say) "my experience has got to be mine. There is a point beyond which, if you were to modify my known world, it might possibly be a superior world but it would be no world for me. And from this it follows that something, and something given, is in my world fundamental, and that, while my world remains mine, this something is indispensable and infallible. And the fact, if it is fact, that I cannot produce this element fails to show that it is not there." Now it is one thing, I reply, to allow the existence of a fundamental element, and it is another thing to admit this in the form of an infallible judgment. I wish to emphasise this distinction and to insist that, if there is to be an infallible judgment, that judgment must be produced. On the other hand, I do not seek to deny in every sense the fact of the fundamental element. We are here in a region which so far is perhaps little understood, but for our purpose fortunately the whole question is irrelevant.

We must remind ourselves of the distinction which we laid down above. Conceivably a judgment might be fundamental and infallible for me, in the sense that to modify it or doubt it would entail the loss of my personal identity, while yet to another mind that modification or that doubt might be possible and necessary. Of course I do not mean that anything which is something for me, could by a wider experience be taken as something which in no sense exists. I mean that the character in which it offers itself to me in judgment might by a wider experience be seen to need correction, and might, apart from that correction, be classed

Again, to pass from this to another point, I may be asked whether the instance of a man in collision with a new environment to which he cannot adapt himself presents no difficulty to our general criterion. In our case none, I reply, since we hold all such knowledge for relative. A difficulty arises only in the case of those who take judgments as absolute. We must, however, remember that, in the above instance of collision between inner and outer worlds, it would be wrong to assume that the man who prefers his inner world goes against the weight of his immediate and intuitive experience.

as error. I am speaking here (the reader will remember) about particular "facts" of feeling perception or memory. And with regard to these I do not perceive the way by which I am to pass from relative to absolute infallibility, and I do not know how to argue here from an assumed necessary implication in my personal existence to a necessity which is more than relative. Am I to urge that a world in which my personal identity has been ended or suspended has ceased to be a world altogether? Apart from such an argument (which I cannot use) I seem condemned to the result that all sense-judgments are fallible.

The repugnance excited by this conclusion seems due to several grounds. Our immediate experience is not fallible, and this character (we have seen) is mistakenly transferred to those judgments which claim to deliver that experience. And further we had the false identification of knowledge with a mechanical superstructure supported by an external foundation. But behind this we have the demand for absolute reality in the shape of self-existent facts and of independent truths. Unless reality takes this form it seems to be nowhere, and so we go on to postulate absolute knowledge where no more than probability is attainable. Again, if the conclusion and the principle advocated here are accepted, the whole Universe seems too subject to the individual knower. What is given counts for so little and the arrangement counts for so much, while in fact the arranger, if we are to have real knowledge, seems so dependent on the world. But the individual who knows is here wrongly isolated, and then, because of that, is confronted with a mere alien Universe. And the individual, as so isolated, I agree, could do nothing, for indeed he is nothing. My real personal self which orders my world is in truth inseparably one with the Universe. Behind me the absolute reality works through and in union with myself, and the world which confronts me is at bottom one thing in substance and in power with this reality. There *is* a world of appearance and there *is* a sensuous curtain, and to seek to deny the presence of this or to identify it with reality is mistaken. But for the truth I come back always to that doctrine of Hegel, that "there is nothing behind the curtain other than that which is in front of it".[1] For what is in front of it is

[1] I believe these to be Hegel's words, but I cannot give any reference for them. Almost the same words will, however, be found in *Phänomenologie* (second edition), p. 126. This is the last page of the division marked A. III.

the Absolute that is at once one with the knower and behind him.

The conclusion advocated in these pages is, however, but limited. With regard to the two aspects of coherence and comprehensiveness I have in these pages not asked if they are connected in principle. I have merely urged that it is necessary to use them in one, and that here and here alone we have the criterion of perceived and remembered truth. And I have argued that in principle any judgment of perception or memory is liable to error, and I have urged that, if this is not so, the right conclusion is to chaos. But to some of the points here left unsettled I hope to return.

II.—THE RELATION OF TIME AND ETERNITY.[1]

By John Ellis McTaggart.

1. The true nature of Time, and especially the question how far it is absolutely real, have been much discussed in philosophy. But there is, I think, no ambiguity in speaking of Time. Every one means by Time the same characteristic of experience—a characteristic present in the experience of each of us.

2. Eternity is a more ambiguous word. It is used in at least three distinct senses: to denote unending time, to denote the timelessness of truths, and to denote the timelessness of existences.

The first sense need not detain us long. It is admitted to be a rather improper use of the word, and is only important on account of its frequency. The great majority of people, for example, who say that they believe that they will live eternally, do not mean that they believe in a timeless life, but that they believe in a life in time which will never end. This is not the only idea in the popular conception of immortality, nor the best, but it is the most common. In this sense the relation of Eternity to Time is, of course, very simple. Time—finite Time—is simply a part of Eternity.

We pass on to the deeper meanings of Eternity. But first I should wish to say that, although it may be a shallow view of Eternity to see nothing in it but unending Time, yet I cannot regard the question of unending existence in time with the contempt with which it is sometimes treated. If, for example, it were proved that the true nature of man was timelessly eternal, yet I cannot see that the question of his future existence in time would be either unmeaning or unimportant. It would, on any theory, have as much meaning as the statement of his present existence in time—which may be partially inadequate, but has certainly some meaning. And it may very well have great importance. This, however, is a digression.

3. The second sense in which Eternity is used is to de-

[1] Address before the Philosophical Union of the University of California, 23rd August, 1907.

note that timelessness which is said to be possessed by all general laws, and, indeed, by all truths, particular as well as general. "The angles of a triangle are equal to two right angles." "The flash of a distant cannon is seen before its report is heard." "The date of the battle of Waterloo is the 18th of June, 1815." Of these truths the last two have reference to time, and the third is not a general law, but a particular fact. Yet, it is said, all three truths are timeless. Any man's knowledge of them, indeed, is an event in time. It begins at a certain moment, and has a certain duration. And there may well have been times when none of these truths was known to any person. But the truth, it is said, must be distinguished both from our knowledge of it, which is in time, and the subject-matter referred to, which may be in time. And the truth, it is said, is always timeless.

There is much to be said for this view; but also, I think, something to be said against it. I do not propose to discuss it here. It would take us too far, and is not essential for our purpose. For, if we define Eternity in this manner, the relation of Eternity to Time is very simple. It is simply the relation of a truth to the subject-matter of the truth. About every substance existing in time, and about every event in time, however slight or ephemeral, many propositions—indeed, an infinite number of propositions—will be true. And since, on this view, nothing that exists will be eternal, but only the truths about them, the relation between Eternity and Time will simply be a case of the relation between a truth and the reality of which it is true. What that relation is, constitutes, indeed, a highly interesting question. But the special natures of Eternity and Time will not enter into it.

Nor does the establishment of an Eternity, in this sense, give us any fresh view of the nature of reality, or afford us a glimpse of any greater permanence or stability in the universe than appears on a *prima facie* view of experience. Everything, no doubt, has on this view a certain connexion with Eternity. But everything has exactly the same connexion, and that without any transformation of its nature, but taking it just as it appears. We can look at ourselves *sub quadam specie aeternitatis*, for each of us exists, and the truth of his existence is eternal. But then—for an hour or two—a bridge-party exists, and it can be looked at *sub quadam specie aeternitatis*, as easily as a human being. And so can the bubbles in a glass of soda-water—I do not mean the substance of the water, but the shape which it assumes for a moment.

And even events have the same timelessness. If I sneezed on last Christmas day, the truth which expresses that event is, in this meaning of Eternity, as eternal as the truth of love, or of man's existence, or of God's existence, if he exist. No person and no thing are eternal on this view. But about everything, permanent, ephemeral, high and low, there are numberless eternal truths. The conclusion may be correct, but it cannot be called very interesting or significant.

The contemplation of eternal truths, indeed, may be in the highest degree interesting and significant, though whether it is—as Spinoza seems to have held—the highest activity of which spirit is capable may be doubted. But then the contemplation of eternal truths is not itself a truth. It is an activity. And it cannot, therefore, be eternal in the sense which we have so far discussed.

4. We pass to the third meaning of Eternity, which will occupy us for the rest of the paper, in which it is used of the timelessness of existences. Existence is, I think, like Time, too ultimate to admit of definition. But it is not difficult to determine the denotation of the word. In so far as substances, or the qualities and relations of substances, are real at all, they exist. In so far as events are real, they exist. On the other hand, if truths, and the ideas which are the constituent parts of truths, have any independent reality, it is not a reality of existence—though of course our *perceptions* of such truths exist, since they are psychical events. Thus the Emperor of China exists. His moral character, and the reciprocal influences between him and his subjects exist. So do the events of his daily life. On the other hand the Law of Excluded Middle, the Law of gravitation, and other true propositions do not exist, although my knowledge of the Law of Excluded Middle exists as an event in my mind.

Whatever is temporal exists. This seems to be generally admitted, for those thinkers who hold that truths and ideas have a reality which is not existence, admit that such reality would be timeless. Whatever is temporal then, and is real at all, exists. But is the converse true? Is all existence temporal?

All existence which presents itself as part of our ordinary world of experience presents itself as temporal. But there may be reality which does not present itself to us in the ordinary course of things, though search may reveal its presence. And, again, a thing may present itself in a more or less deceptive fashion. And it is frequently maintained

that we have reason to believe that some reality which exists, exists timelessly—not merely in the sense that its existence endures through unending time, but in the deeper sense that it is not in time at all.

5. The possibility of timeless existence has been denied. Lotze, for example, makes time an essential characteristic of existence—his terminology is different but it comes to this. But the general opinion of thinkers has been the other way. For most men have believed in the existence of a God, and most of those who have not believed in a God have believed in the existence of some impersonal Absolute. And God or the Absolute has generally been conceived as timeless. This has not been universal. Lotze regards God as existing in time. And among theological writers there have doubtless been some who, when they called God eternal, only meant that he existed through endless time, or that his nature did not change. But as a rule philosophy and theology have held that God exists timelessly.

It seems to me that this opinion—that timeless existence is possible—is correct. To exist and to be in time seem to me two characteristics, each quite distinct from the other. And, while it seems clear that nothing could be in time without existing, I fail to see any corresponding impossibility in something existing without being in time. If so, timeless existence is possible. Whether it is actual—whether we have reason to believe that anything does exist out of time—is a question which I shall not discuss in this paper. My object here is only to discuss the relation of existence in Time to existence in Eternity, should there be any such eternal existence.

6. We, who are endeavouring to estimate the relation, appear to ourselves to exist in time, whether we really do so or not. It is not strange, therefore, that men should have endeavoured to express their relation to the Eternal by terms borrowed from Time, and to say that the Eternal is present, past or future. We shall consider which of these terms is the most appropriate metaphor, and whether any of them are more than metaphors.

In the first place, we may consider that existence in Time and existence in Eternity are equally real. Then, since the same thing clearly cannot exist both in time and timelessly—if both predicates are taken in the same sense and as equally real—the only possibility would be that some existent being was in time, and some existent being was out of it. (This is exemplified in the very common theological view, according to which God exists timelessly, but everything else

exists in time.) What would the relation be, in such a case, between the temporal and the eternal?

The eternal is often spoken of, under these circumstances, as an "eternal present". As a metaphor this has, as we shall see, some appropriateness, but it cannot, I think, be taken as more than a metaphor. "Present" is not like "existence," a predicate which can be applied in the same sense to the temporal and the timeless. On the contrary, its meaning seems to include a distinct reference to time, and a distinct reference to past and future. The Present has been future and will be past. I do not say this is an adequate definition of the present, but it does seem to be an essential characteristic of the present. If so, the timeless cannot be present. The eternal, the timeless, must be distinguished from what exists unchanged in time. The Pyramids exist in time, but they have existed through thousands of years, through all of which they have been present. And supposing that human beings were really in time, but also immortal, we could say of every man, after he had been born, that he would be endlessly present, since in every moment of future time he would exist. But persistence through time is, as we have seen, quite a different thing from timeless existence.

7. There is one reason which has, I think, led to regarding the eternal as an eternal present, which rests on a confusion. Of anything which exists in time, my judgment "It is true that X exists now" is true when X is in the present and not when X is in the future or past. Now supposing that Z exists eternally, my judgment "It is now true that Z exists" will be always true. Hence, I believe, it is sometimes supposed that Z is always present. But this is a confusion. For "It is now true that Z exists," where the "now" refers to the truth of the judgment that Z exists, is by no means the same as "It is true that Z exists now," where the "now" refers to the existence of Z. A judgment is a psychical event in my mind, and is in time, even if I am judging of the timeless, so that "now" is an appropriate word to use about it. But "now" cannot be used about the existence of the timeless itself.

8. As a metaphor, however, there is considerable fitness in calling the eternal a present. In the first place, the future and the past are always changing their positions in regard to us. The future is always coming nearer, while yet remaining future. The past is always going farther away, while yet remaining past. The present, however, while it remains present, does not change in this way. It is

continually being born out of what was the future. It is continually changing into the past. But as present it does not change in its relation to us.

This affords a certain analogy to the timeless which, of course, is not capable of change. The timeless does not change, and therefore, nothing in the timeless can bring it nearer to us or farther from us. And the constancy which this involves has an analogy with the constancy of the present while it remains present.

9. In the second place the present is always regarded as having more reality than the past or future. So much is this the case that we feel no inappropriateness in saying of something which is not existing at present that it does not exist. We should not feel the expression unusual if we said that the Holy Roman Empire does not exist, which is the same expression we should use of More's Utopia. And yet we no more mean to deny the past existence of the Holy Roman Empire than we mean to deny the present existence of the United Kingdom. Now the eternal does not appear with the diminished reality of the past and future. It has all the reality of which its nature admits. And the eternal is generally considered as more real than the temporal, for, when some reality is held to be eternal and some temporal, it is God or the Absolute which is considered eternal, and the created or finite which is considered temporal. It will thus resemble the reality of the present more than the reality of the past or future, and so it will be an appropriate metaphor to regard it as present. This is especially the case when we consider our emotions toward the eternal—a point of great importance since the eternal in this case would be, as we have just said, God or the Absolute. It is clear that the emotions of a man who loved an eternal God would stand much closer to the emotions of a man who loved a being existent in present time than they would the emotions of a man who loved a being who had ceased to exist, or who had not yet come into existence.

10. In the third place it must be remembered that it is only the present, and not the past or future, which we regard as capable of exercising immediate causal influence. The future is not conceived as being a cause at all—since causality always goes towards what comes later, and never back towards what is earlier. The past is certainly regarded as acting as a cause, but not immediately. The past has produced the present, and so is the remote cause of what the present is now occupied in producing. But it is not the immediate cause of what is now being produced. This, I

think, is the inevitable way of looking at causality in connexion with time. If it leads to contradictions—and I do not say that it does not—they are contradictions which spring from the nature of time. They may affect our judgment as to whether time is ultimately real, but we cannot get rid of them while we are looking at things in time.

Now the eternal can be looked on as a cause. I do not wish to inquire whether the view is correct, which is often held, that the eternal can be the sole cause of anything. But there is no doubt that, if anything eternal exists, it can be a part-cause of an effect, so that the result would be different from what it would have been except for that eternal being. And the causation of this eternal being must be regarded as immediate, in the same way as the causation of a being present in time. For this reason, also, then, the present is an appropriate metaphor for the eternal. But it cannot be more than a metaphor. Presentness involves time, and cannot be predicated of the timeless.

11. We must now consider another theory on the subject of timeless existence. This holds that all existence is really timeless, and that the *prima facie* appearance of Time which our experience presents is, in reality, only an appearance, which disguises the nature of the timeless reality. In this case we shall not, as in the previous case, divide all existence into two facts, one eternal and one temporal. All existence will be eternal. And though this will exclude the possibility of any of it being really temporal, yet it will leave the possibility open that some, or even all, of it may appear to us as temporal.

The theory of the unreality of Time is doubtless very difficult to grasp fully. And doubtless it presents very many difficulties. I do not intend, in this paper, to advocate it, or even to develop it at length, but merely to consider, as before, what would be the relation of Time to Eternity, should the theory be true. It cannot be doubted that it is worth while to consider the consequences of this theory. For it is one which is very largely held by philosophers. The exact nature of Eternity in Spinoza's philosophy, and its relation to time is a very difficult problem, especially since it is not improbable that Spinoza himself did not distinguish with sufficient clearness between the timelessness of truths and the timelessness of existence. But the doctrine that all reality is timeless was unquestionably held by Kant—though he would not perhaps have used this expression. It was held by Schopenhauer. It was a fundamental doctrine of Hegel's philosophy, and in this respect Hegelians have fol-

lowed their master more closely than has been the case with other doctrines. And, at the present day, it is held by the greatest of living philosophers, Mr. Bradley. If we turn from philosophers to theologians we shall find the same doctrine. The view that all reality is timeless is not so general, of course, among theologians, as the view that some reality is timeless. But theology has never in any country or in any age, remained for long together untouched by mysticism. And the unreality of time, although it is not held by all mystics, is one of the most characteristic mystical tenets.

Once more in the Far East, where philosophy and theology do not admit even of that partial distinction which is possible in the West, we find the doctrine of the unreality of time assumes cardinal importance.

A theory which has attracted so much support, and which continues to attract so much at the present day, must, right or wrong, have much to be said in its favour. Teachers so great, and so different, do not adopt such a doctrine without grave reasons. For my part I am convinced that in spite of the very great difficulties which belong to the theory, it must be accepted as true. But at present I am merely concerned to point out that, whether the theory be true or false, it is no waste of time to consider any consequences that would follow from accepting it.

12. What is the precise description which we must give to Time on this theory? We cannot call it a mistake, for to perceive things in time does not necessarily involve an erroneous judgment. If a person who perceives things as in time believes that they really are in time, that would of course be an erroneous judgment. But if the theory is true, a person who believed the theory would not be making any erroneous judgments on the subject. His judgment would be "I perceive things as in time, and I cannot perceive them any other way, but they are not really in time, but timeless". In this judgment there would be no error. And thus the perception of things in time must not be called a mistake. It hides, more or less, the true nature of things, but it does not involve making any false judgment about their nature.

And since the perception of things in time does not necessarily involve an error, it follows that, when the error has been there, and is removed, it will not alter the perception of things in time. If I begin by holding the view—which may be wrong, but is certainly the most obvious view—that things are really in time, and are then convinced by philosophical arguments that they are really timeless, I shall, none the less, continue to perceive the things in time.

Thus we must conceive our perception of things in time to be an illusion, of the same character as those which make us see the sun at sunset larger than at midday, and make us see a straight stick crooked when it enters the water. I do not, after childhood, suppose the stick to be really crooked. But however clearly I may satisfy myself, either by reasoning or by the sense of touch, that the stick has not changed its shape since it was put in the water, I shall continue to get visual sensations from it resembling those which would be given me by a crooked stick in the air. Of this sort is the illusion of time—though it is far more general, and far more difficult to grasp. It hides part of the truth, it suggests a wrong judgment—for the obvious conclusion from our experience, as I said just now, is to hold that things are really in time. But it does not necessarily involve a wrong judgment, and it is not removed by a right judgment.

13. What relation, then, does Time bear to Eternity on such a theory as this? The answer will, I think, vary. When we see existence under the form of time, the theory tells us, to see it more or less as it really is not. At the same time, the appearance is not *mere* illusion. We perceive, in spite of this illusive form of time, some of the real nature of the timeless reality. So if we look through a window of red glass we shall see the objects outside correctly as to their form, size and motion though not correctly as to their colour. The question is, of course, much more complicated here. We cannot get round on the other side of time, as we can on the other side of the glass, and so discover by direct observation what part of our previous experience was due to the form of time. And to reach and justify an idea of what the true timeless nature of existence may be is a very hard task, though I think not an impossible one. We must content ourselves here with the general result that where existence appears to us under the form of time, we see it partly, but not entirely, as it really is.

Thus the way in which, at any moment of time, we regard existence is more or less inadequate. And it seems to me that the relation of time to Eternity depends on the relative inadequacy of our view of reality at different moments of time.

The decisive question—this is the theory I wish to put before you—is whether there is any law according to which states in time, as we pass from earlier states to later, tend to become more adequate or less adequate representations of the timeless reality.

14. Let us first consider what would happen if there were

no such law. In that case there would be no tendency for the future, because it was future, to resemble the timeless reality more or less than the present does. There might be oscillations, even then, in the adequacy with which time represented Eternity. At one moment my view of the universe might distort the truth either more or less than my view of the moment before had distorted it. But such oscillations are like the waves of the sea. At a particular moment the surface at a particular point may be higher than at the moment before. But this does not give us the least reason for concluding that an hour later on it will also be higher than it was at the past moment, or that the average height is rising.

If the adequacy of the time-representations is in this condition, the relation of Time to Eternity will, I think, be expressible in the same way in which we expressed it when Time and Eternity were taken as equally real. That is to say, the most appropriate metaphor for the relation is to consider Eternity as a present, but this is nothing more than a metaphor.

The metaphor is appropriate for the same reasons as it was before. In the first place, the relation of Eternity to time is constant. In some particular moments of time we may, as I have said, get a less adequate representation of Eternity than at others, but if we take time as a whole it neither approximates to Eternity nor diverges from it. And, for the reasons explained above, there is a certain appropriateness in using presentness as a metaphor for this unchanging relation.

In the second place, the metaphor is appropriate here, as it was before, to express the reality of the eternal. The eternal has not that diminished reality which we attribute to the past and the future. Indeed, its reality is relatively greater here than it was on the other theory. In that theory the Eternal was generally the most real, for it generally included God or the Absolute. But here it is an inevitable result of the theory that the Eternal is not only the most real, but the only true reality. It is more important than before, therefore, to express it by a metaphor drawn from the greatest reality in time.

In the third place, the Eternal must certainly, on this theory, be regarded as exercising immediate causal influence, or, rather, as having a quality of which causal influence is an imperfect representation. For everything depends on the nature of the eternal, which is the only true reality.

At the same time, to say that the eternal is eternally

present remains a metaphor only. It is not a literally correct description. For the present, as we saw, is essentially a time-determination, and the eternal is not in Time.

15. So far, I think, I have not said much that is controversial, and certainly nothing that I should claim as original. But I have now a thesis to put forward which, whether it is original or not, is certainly controversial. I submit that although to us, who judge from the midst of the time-series, the presentness of the eternal can never be more than a metaphor, yet, under certain conditions, the assertion that the eternal was past or future might be much more than a metaphor. This statement will doubtless seem highly paradoxical. The eternal is the timeless, and how can the timeless have a position in the time-series? Still, I believe this position can be defended, and I will now attempt to sketch my defence of it.

16. So far we have considered what would happen if there were no law according to which states in time, as we pass from earlier states to later, tend to become more adequate or less adequate representations of the timeless reality. But what would happen if there were such a law?

Events in time take place in an order—a fixed and irreversible order. The flash of a distant cannon is perceived before the report. The report is not perceived before the flash. The Battle of Waterloo was fought before the Reform Bill was passed. The Reform Bill was not passed before the Battle of Waterloo was fought. Now what determines this order?

The mere form of time does not do so. If things happen in time they must happen in an order, and a fixed and irreversible order. So much the nature of time demands. But it gives us no help as to what the order shall be. If the Battle of Waterloo and the passing of the Reform Bill are to take place in time at all, the nature of time requires either that they shall be simultaneous or that the Battle shall precede the Bill, or that the Bill shall precede the Battle. But it gives us no help towards determining which of these three alternatives shall be taken.

What does determine the order of events in time, on the supposition, which we are now discussing, that Time is only an illusory way of regarding a timeless reality? I believe myself that there is good reason to hold that the order is determined by the adequacy with which the states represent the eternal reality, so that those states come next together which only vary infinitesimally in the degree of their adequacy, and that the whole of the time-series shows a steady

process of change of adequacy—I do not say yet in which direction.

I think something can be said towards proving this statement, but it would want far more than a single lecture to say it, and I do not propose even to sketch it now. Nor is it necessary for our present purpose, which is only to consider what the relation of Time to Eternity would be under various circumstances. Let us now proceed to consider what that relation would be under these circumstances.

17. Let us suppose, then, that the states of the time-series were such that each state was a more adequate expression of the reality than the state on one side of it, and a less adequate representation of reality than the state on the other side of it, so that they formed a continuous series in respect of the adequacy of their representation. And let us suppose that the most adequate of these representations—which will be, of course, at one end of the series—differs from the reality it represents only by an infinitesimal amount. What is the relation here between Time and Eternity?

This will depend upon the direction in the series in which greater adequacy is to be found. It may be, in the first place, that the later stages of the time-series are more adequate than the earlier stages. In that case the present stage will be more adequate than any of the past, and less adequate than any of the future.

We may go further than this. If time is unreal, as we have supposed, then the illusion that time exists can no more be in time than anything else can. The time-series, though a series which gives us the illusion of Time, is not itself in time. And the series is really therefore just a series of representations, some more adequate and some less adequate, arranged in the order of their adequacy. This—the series of adequacy—is the only serial element which remains as real, if time is to be condemned as unreal.

When, therefore, we say that a certain stage in the time-series is still in the future, the real truth, if the theory we are considering is correct, is that the stage in question is a less inadequate representation of the timeless reality of existence than our present stage.

Now the timeless reality itself contains all its own nature. And therefore it will stand to the least inadequate of the representations of itself as this stands to the next least inadequate, and so on. Since, by our hypothesis, the representations of reality in the time-series approach the reality till the inadequacy finally becomes infinitesimal, the last of the series of time-representations will differ only infinites-

imally from the reality itself. And, since time is continuous, the stage before the last will differ from the last in the same way—by being infinitesimally less adequate.

Thus the timeless reality—the Eternal—may itself be considered as the last stage in a series, of which the other stages are those which we perceive as the time-series,—those stages nearest to the timeless reality being those which we perceive as the later stages in time. When, therefore, we are looking at things as in time—as we must look at them—we must conceive the Eternal as the final stage in the time-process. We must conceive it as being in the future, and as being the end of the future. Time runs up to Eternity, and ceases in Eternity.

18. This conclusion will doubtless be rejected by many people without further examination as grossly absurd. How can the timeless have a position at the end of a time-series? How can Eternity begin when Time ceases? How can Eternity begin at all?

The answer to these objections, I think, is as follows: Of course, on this view, Eternity is not really future, and does not really begin. For Time is unreal, and therefore nothing can be future, and nothing can begin. What, then, is the justification of regarding Eternity as future? It lies, I maintain, in the fact that Eternity is as future as anything can be. It is as truly future as to-morrow or next year. And, therefore, when, taking Time as real, as we must do in everyday life, we are endeavouring to estimate the relation of Time to Eternity, we may legitimately say that Eternity is future. From the point of view of time, the events of to-morrow and next year are future. And if Eternity is as truly future as they are, it is legitimate to say that Eternity is future. It is not absolutely true, but it is as true as any other statement about futurity. And it is much truer than to say that Eternity is present or past.

Let us recapitulate. If time is unreal then the time-series is a series of more or less adequate representations of the timeless reality, and this series itself is not really in time. If what determines the position of the stages in the time-series is the different degrees of adequacy with which they represent the timeless reality, then the series which is not really a series in time, is really a series of degrees of adequacy. If the most adequate of these stages has only infinitesimal inadequacy, then the timeless reality, in its own completeness, forms the last stage of the series. And if the distinction between earlier and later stages is that the later are the more adequate, then—since the future is later than

the present—we must place the timeless reality in the future, and at the end of the future.

Thus to say that Eternity is future on this theory is far more accurate than it was, in the two previous cases, to say that Eternity was present. For in those cases Eternity, though it had some analogy to the present, was not as fully present as to-day's sunlight is, which is in the fullest sense present. But in this case Eternity is as really future as to-morrow's sunlight, which is in the fullest sense future. The presentness of Eternity was only a metaphor. Its futurity, in this case, is as true as any futurity.

19. Let us pass to another case. Let us suppose, as before, that the truth of the time-series was a series of representations arranged by their degrees of adequacy, and running on until the extreme term of the series only differed from the timeless reality itself by an infinitesimal amount. But let us suppose that the series runs the other way, so that it is the more adequate members which appear as the earlier stages of the time-series, and the less adequate members which appear as the later stages of the time-series. In this case we should have to regard the timeless reality as the beginning of the past, instead of as the end of the future. We should have to regard ourselves as having started from it, not as destined to reach it. It is obvious that from a practical point of view the difference between these two cases may be very great—I shall return to the practical importance of the relation later on. It seems to me that there are reasons for supposing that the first of the two cases is the one which really exists, and that Eternity is to be regarded as in the future and not as in the past. But our object here is merely to realise that, if the second case is true, and it is the more adequate members which appear as the earlier, then Eternity must be regarded as in the past.

20. I may mention a third case, though I think it one which is very improbable. Let us suppose that the stages of the series were arranged, not simply in order of adequacy, but on some principle which placed the least adequate in the middle, and made them more adequate as they diverged from this at either end. And let us suppose, as before, that the more adequate representations only differed from the timeless reality infinitesimally. Then it is clear that the timeless reality would stand to the earliest member of the series, as that stood to the next earliest. And it is also clear that the timeless reality would stand to the latest member as this stood to the next latest. And therefore the timeless reality would be a term at each end of the series, which would start

from it and would return to it. In that case we should have to consider the Eternal both as the beginning of the past, and the end of the future.

21. Thus we see that, under certain suppositions, the Eternal may be said to be past or future, not only as a metaphor, but with as much truth as anything else can be past or future. But this is not the case about the present. On no supposition could we be justified in saying now that the Eternal was present. If it were present, it would bear the relation to our present position in the time-series that the present does—that is, of course, it would have to be identical with it. And the timeless reality is certainly not identical with a position like our present one, which represents it as in time, and, therefore, according to our theory, represents it inadequately. On several suppositions, as we have seen above, the most appropriate *metaphor* for the Eternal is that of an eternal present. But on no supposition can it be more than a metaphor.

22. It remains to say, as to the cases in which the Eternal is regarded as being the end of the future or the beginning of the past, that it is possible that the past or the future in question might be infinite in length. I do not see anything which should exclude this supposition, and enable us to assert that the present has been reached in a finite time from the Eternal, or that the Eternal will be reached in a finite time from the present.

In mathematics that which only happens at an infinite distance is said to be the same as that which never happens at all. Thus two parallel straight lines are said to meet at an infinite distance. Since mathematicians adopt this method of expression it has probably some real convenience for mathematics. But, apart from the conventions of that special science, it seems to me that there is a very real difference between a series such that it reaches a result after an infinitely long process, and a series such that it never reaches that result at all.

Even, therefore, if the series of stages which intervene between the present and the timeless reality were such as would appear as an infinitely long time, I should see no impropriety in speaking of the timeless reality as the extreme stage of the series, from which it started, or to which it attains. At the same time, I see no more reason to suppose the length infinite than to suppose it finite.

23. I propose to devote the rest of my paper to a consideration of some aspects of the possibility that it may be right to regard Eternity as the end of the future.

It will be seen that this view has a very strong resemblance to a very common Christian view. The Christian heaven is sometimes looked upon as enduring through unending time. But it is also often looked upon as a timeless state. At the same time, it is generally looked on as in the future. We are not in it now. We have not been in it before birth—indeed, most Christians deny that we existed at all before the birth of our present bodies. We are separated from it by death—not, indeed, that death alone would place us in it, but that we shall not reach it till we have passed through death.

This has not been the universal view of Christianity, but I think it cannot be denied that it has generally been held that heaven was in the future. Heaven may be held to be a state of the mind, not a place or an environment. But still it is a state of the mind which is yet for us in the future. "Now we see in a mirror, darkly; but then face to face." (1st Epistle to the Corinthians xiii. 12.) The beginning may be present here, but not the completion. Moreover, even what is attained of it on earth has to be attained, to be gained where it was not before, and so was once in the future and is still for many men in the future.

This view of the Christian heaven has been severely criticised lately, both from inside and from outside Christianity. It has been said that heaven, if it is perfect, must be timeless, and that it is generally admitted to be timeless, and that therefore it is absurd to place it in the future, and it should rather be regarded as an eternal present.

The critics have a certain subjective justification. They have investigated the relation of Time to Eternity more deeply than the majority of those who hold the view criticised. They have perceived the difficulties of giving Eternity a place at the end of the time-series, while many of those who held that heaven was future had not perceived those difficulties at all. Yet we must hold, I submit, that the view of heaven as now future might, under certain circumstances, be much truer than the view of heaven as now present could be under any circumstances.

Let us recapitulate once more the conditions. The Eternal can be rightly regarded as future if time is unreal, if the series which appears to us as a time-series is a series of representations arranged according to adequacy, if the highest of the series only differs by an infinitesimal amount from the reality represented, and if it is the more adequate representations which appear as latest in the series.

Now many people who hold heaven to be future would

hold that it was attained gradually, by advancing stages which got higher till the last led into the timeless perfection without any breach of continuity, and that the higher of these stages came later. Three of the four conditions are thus complied with. The first—that time is unreal—is, of course, less frequent. But if this is combined with the other three—as it often is, and may very well be—then it seems to me that the idea of a timeless heaven as future is quite justifiable, and that the Christians who held this belief, while not seeing so deeply as such critics as Mr. Bradley and Mr. Haldane, had in point of fact grasped the truth, though without seeing very clearly why it was true.

24. The practical importance of the question whether the Eternal can be regarded as future appears to me to be enormous. The supreme question, from the point of view of practical importance, is whether good or evil predominates in the universe, and in what proportion. The practical importance of philosophy consists, not in the guidance it gives us in life—it gives us, I think, very little—but in the chance that it may answer this supreme question in a cheerful manner, that it may provide some solution which shall be a consolation and an encouragement.

In what way can we hope to do this? It cannot be done by empirical induction. Even granting that we have evidence for coming to a favourable conclusion about the state of people on this planet at the present time—and this is all we can know empirically—it would be far too small a basis for an induction which would give us even the least probability as to the universe as a whole through the whole of time.

The belief in a God who is on the side of the good has been one of the supports on which men have most often tried to base an optimistic solution of this question. But, even if we accept the existence of such a God, it will not by itself afford sufficient ground for what we seek. We are wrecked against the old difficulty—the difficulty which Augustine stated with perfect clearness, and which theists, in all the centuries that have passed, have never avoided. Either God can do everything he likes, and then evil, since it exists, cannot be repugnant to him, and his existence affords no ground for limiting its extent or duration. Or else God cannot do everything he likes, and then we cannot be certain that evil, in spite of God's efforts, may not predominate over good now, and be destined to increase in the future.

Attempts have been made to prove the predominance

of good from the intrinsic nature of good and evil. But here, as it seems to me, any argument which proves anything proves too much, for they all tend to prove that there is no evil at all. And such an argument may, I fear, be dismissed as a *reductio ad absurdum*.

25. What other course remains—to those of us who are not so happily constituted as to be able to believe a thing because we want to believe it? One attempted solution remains—that on which was reared the most magnificent optimism that philosophy has ever seen, the optimism of Hegel. This solution rests on the unreality of Time. Only the Eternal reality exists, and the Eternal is perfectly good. All the evil which we suppose to be in existence is part of the Time-element which we wrongly suppose to be in existence. And so there is no evil at all.

This solution, however, in the form which it takes with Hegel, will not give us what we seek. In the first place, it has really no optimistic result. To tell us that evil is unreal does not make what we think to be evil in the least less unpleasant to suffer or in the least less depressing to expect. And even if it had that effect on the people who know the truth, how about the people who do not know it? The only ground of optimism would be found in a belief that this illusion of evil was limited in quantity or transitory in apparent duration. And the assertion of its unreality would not permit us to limit the extent or the duration of our illusion of its reality.

In the second place, I do not think that the theory can be accepted as true. It is possible that there is no sin in existence—indeed, if time is unreal, it seems inevitable that there should be no sin. It is even possible that there should be no pain—though that is not so simple. But evil is wider than sin or pain. And it seems, to me at any rate, certain that even the illusion that I am sinful or in pain is evil. I may not be really sinful or really in pain, but in some sense the illusion of the sin or pain exists, and that is a real evil. If we doubt it, let us ask whether we should not think the universe better if a given illusion of sin or pain was replaced with an experience of virtue or pleasure. Or let us ask whether we should not blame a creator who needlessly inserted such illusions into the universe he created.

26. But if we abandon the attempt to base an optimistic solution on the unreality of time through the unreality of evil, yet there is another way in which the unreality of time may help us.

It is a certain fact—which may some day be accounted

for, but which cannot be denied, whether it is accounted for or not—that good and evil in the future affect us quite differently from good and evil in the past. Let us suppose two men, one of whom had been very happy for a million years, and was just about to become very miserable for another million years, while the other had been very miserable for a million years, and was now about to be very happy for the same period. If we suppose them, in some neutral hour between the two periods, to remember the past and to be certain of the future, it is certain that the second would be in a very much more desirable position than the first, although the total amount of life which each would be contemplating shows exactly the same amount of pleasure and pain.

Past evil, as such, does not sadden us like future evil. We may be saddened by the results which it has left behind in the present, or which may be expected to appear in the future—if those results are themselves evil, which of course is not always the case with the present results of past evils. Or the remembrance of past evil may remind us that the universe is not wholly good, and make us fear for evil in the future. And a particular past evil may give us, not merely this general apprehension, but particular reasons to fear some particular future evil. And, once more, if past evil has been caused by the wickedness of any person, the fact that the evil has passed away will not affect the fact that the responsible person is still wicked, unless indeed he has improved and repented.

27. If, therefore, we arrived at a theory of the universe which was unable to deny the existence of evil, or to assert that over the whole of time good predominated over evil, or that it did so at present, there would be still a chance for optimism. If such a theory were able to assert that, whatever the state of the universe now, it would inevitably improve, and the state of each conscious individual in it would inevitably improve, until they reached a final state of perfect goodness, or at least of very great goodness—surely this would be accepted as a cheerful theory. Surely this would give, as much as any belief can give, consolation and encouragement in the evils of the present. Indeed, it is nearly as favourable a theory as could be framed, for if we went much beyond this in the direction of optimism, we should soon reach the denial of evil, and then, as was said above, our theory would break itself against facts which cannot be denied.

28. But how could such a theory be established? No

empirical evidence which we could reach would afford even the slightest presumption in favour of such a vast conclusion. And how can we prove *à priori* that good will predominate over evil more in the future than it has in the past, or than it does in the present? What link can *à priori* reasoning find between the later and the better?

I do not see how it can be done if Time is to be taken as real. But if Time is unreal, I do see a possibility—more I do not venture to say at present—of such a demonstration. I do see a possibility of showing that the timeless reality would be, I do not say unmixedly good, but very good, better than anything which we can now experience or even imagine. I do see a possibility of showing that all that hides this goodness from us—in so far as it is hidden—is the illusion of time. And I do see a possibility of showing that the different representations which appear to us as the time-series are in such an order that those which appear as later are the more adequate, and the last only infinitesimally differs from the timeless reality. In that case we must look on the Eternal as the end of Time; and on Time as essentially the process by which we reach to the Eternal and its perfection.

The reality of the Eternal can only have comfort for us, then, if we conceive it as future, since it is to the future that optimism must look. Nor do I see how we can regard the future optimistically unless we regard it as the progressive manifestation of the Eternal. Whether this can be done, will be for the future to pronounce—the possibilities of which I have spoken may prove to be demonstrations or to be the merest fallacies. Only I do see a chance of a happy solution in the relation of Time to Eternity, and, as philosophy stands at present, I see it nowhere else.

III.—THE HIGHER IMMEDIACY.

By A. R. Whately.

The general difficulty that besets Absolute Idealism, when it would enter into organic relations with the content of concrete life, assumes a special form when the empirical personalities around us are to be viewed as irreducible constituents of an absolute system. Whether, like Dr. McTaggart, we approach the monad through the system, or, with Prof. Howison, work outward from the monad by self-definition, the same essential problem remains. We can here only allow ourselves the briefest preliminary glance at that problem. From one point of view, it may be thus indicated. In such theories, as distinguished from empirical pluralism, it is necessary that in some sense the system, or absolute, shall mediate the relations between the individuals: for thus only can it maintain itself at all, in the absence of any authority to negate their individuality into its own. And it is difficult to understand how it can perform this mediation otherwise than as a unitary presentation in actual experience. One may allow the dialectic to run parallel with the flow of actual experience for a very long way: but surely in the final result that experience must as such be gathered up into the organic total: the distinction between the form and the matter of thought must disappear, not merely on the side of the form, but on the side of the matter. And we cannot simply defer such a consummation to the empirical future. For the very essence of the difficulty lies in the antithesis between the eternal and perfect Reality and the imperfection of its empirical expression. To plead that the discrepancy is only temporary, or only temporal, is no resolution of an antinomy of which the temporal order as such is one of the terms. We shall not have resolved it until, not merely experience in general, but actual and personal experience, shall be actually included in the synthesis; and this inclusion cannot be relegated to the future, unless a real movement be allowed to the matter of intuition in itself, which consistent Idealism cannot allow. If the temporal and eternal planes are once allowed to intersect, we must revise our entire conception of

the relation of experience to ratiocination. If temporal events are ever introduced to help the dialectic over stiles, it cannot be said that, for the dialectic, experience is a constant factor, and only a *conditio sine qua non* of the movement.

The remarks that are to follow are offered, not in controversion, but in defence, of the doctrine of real and ultimate personalities. But I shall essay to defend this common ground from the standpoint of a more intuitional and realistic philosophy. I desire to suggest an answer to the question: Can we not discover in the very meaning and implications of experience itself the moment of absoluteness in the actual personalities of concrete life? Is there no transition-point from the psychological to the transcendental individual? At first sight it would seem not. It would seem as though an experiential connexion with absolute Being cannot be regarded as necessary to, much less constitutive of, personality as such. If we are to be pluralists at all, we must, as it appears, adopt either an empirical personalism, or an intellectualistic theory that reaches the individual by way of abstract ideas. Some of us have fatal objections to both courses; and find, moreover, that the conception of personality which they yield us leaves a good deal yet to be desired. But I think there is a way out of our dilemma.

I am profoundly impressed with the far-reaching importance of that principle which is ignored in the "psychologist's fallacy". Let us give it the broadest and fullest application. We all recognise, in a general way, that a psychosis is liable to be changed by our making of it an object of reflexion. But the merely empirical transformation of particular experiences suggests a deeper-lying problem. When we reflect upon reflexion itself, what grounds of confidence in it, and what limits of that confidence, are disclosed? This inquiry, it is hoped, will illustrate by its own method the theory of knowledge to which it leads us. And because we shall attempt to trace the continuity between sense-immediacy and the highest forms of thought, it will be convenient to retain throughout the terminology belonging to this stage, rather than that of representation and conceptual experience.

The pitfall to which I have alluded may seem to be adequately exhibited when we acknowledge that it is impossible perfectly to reproduce old mental impressions. But so far it might appear that this impossibility is merely empirical, and may, by due caution, be allowed for, so as to avoid any hindrance that it might oppose to our investigations. Its real significance lies deeper than this. To reproduce these im-

pressions means to have them again: to place ourselves within the past mental state. That is the one essential; the other is apparently incompatible with it; namely, that we should stand outside that particular state. Take ordinary reflexion; not that of the psychologist, but that of daily life. When I reflect upon one of my past mental states, my thoughts will comprise two elements: first, a continued or resumed attention to the *object* of the previous perception; secondly, a consideration of the *fact* of that perception, wherein I take account of the circumstances under which it took place and of the personal equation. The second process requires the first, because of course the fact cannot be contemplated apart from the object. But the two impinge upon each other. Reflexion, by its very meaning, seems to demand that I shall stand at once absolutely within and absolutely outside the original mental state. Within it, the state as a state cannot be apprehended; and there is no reflexion, only continued perception, or bare ideal revival continuous with perception. Outside the state, the object belonging to it is invisible and therefore even the state itself cannot be understood. And it is essential to observe that there can be no middle course, no position partly external and partly internal to the state. These two moments of reflexion are obverse, and therefore admit of no intermediary position.

If the original mental state can be represented, then, it would appear, the object originally presented cannot be at the same time again the object of direct consciousness; not because of the distinction between revival and sense perception, but because in fact the genuine original object cannot be revived at all: for there is no guarantee whatever that it *is* the original presentation. To say that we remember that it is, would be obviously absurd: for it would beg the whole question. If revival be discredited, we cannot defend it by any appeal to revival. The truth is, that we cannot possibly guarantee the validity of revival except by reference to its *continuity* with the original presentative state. But this continuity is valid only from within; when we stand outside it we have created a new object, and on what grounds can we maintain that it contains genuine reference to the old? Surely, without a *petitio principii*, we can only do so in terms of presentation; and can we, with no further resources, bridge the transition from continuity to contraposition? Observe that we are not contrasting presentation and revival, but presentation and reflexion; for revival may be spontaneous and a mere retention of the original impression. The transition appears when we pass from the contempla-

tion of the object to the contemplation of the idea of the object as an idea.

We want to see whether these two moments, continuity and contraposition, instead of alternating and negating each other, cannot be brought into organic and concrete unity. I hope in this article to work back to the ultimate immediacy as I understand it, and in so doing to discover an answer to the problem of personality propounded at the outset of this article.

But before dealing with the planes of immediacy, it will be well to leave our antinomy at present where it is, and to note the theory of perception so far implied in our discussion. It is entirely opposed to the fatal fallacy of Locke, which has permeated modern philosophy: "The word 'Idea' . . . serves best to stand for whatever is the object of the understanding when a man thinks". It is opposed even to all theories of sensational data or material, and of perception as a synthesis or synopsis. A few words on this point will bring us round to our main line of argument.

Whatever we may think of sensations as the causes or conditions of perception, it is obvious that, considered as synthetised into percepts, they are already presentations, however elementary. But I find it impossible to understand perception on such a principle. Perception is surely of *individua*, and each *individuum* is presupposed by its qualities, distributively regarded. And, on the other hand, we cannot think of the qualities in their totality without reference to the *individuum* as the bond and principle of that totality. The characteristic of givenness belongs to every presentation, external or internal, however complex. When we have exhausted our analysis of the elements of mental activity requisite to cognition, there yet remains that elusive instant of receptivity that lies between this activity and the actual cognition. Talk as we may of intellectual "construction," the expression, if pressed, becomes positively contradictory. For this presentative character unquestionably belongs to the form, no less than to the matter, of all that consciousness has before it, however subjectively coloured it may apparently be. At first sight it may seem to help us if we regard the data of consciousness as simple undifferentiated reality. This would apparently secure the objectivity of each particular object, while preserving the current conception of synthetic mental activity as the actual genesis of perception. But that would imply that Reality, as such, can be acted upon from outside Reality. If Reality be regarded as the matter of all existence, it must be the form and occasion

also. It must include the fact as well as the substance of presentations, the subjective process as well as its subject-matter. The data of perception are therefore neither psychic material, nor the mere object-in-general. But it is not necessary to elaborate this position, since it is involved in the whole course of our discussion.

It may, however, be well to examine the real import of the term "percept" (or "concept"; for the same considerations apply *mutatis mutandis* to both) in order to discover how, as I think, it has contributed to obscure the issue. The view of perception which I have controverted would be true, no doubt, if the percept were a sort of *tertium quid* between the proper object and the subject. Now, even though we eradicate the notion, implanted in us by Locke and Berkeley, of certain psychic realities as the immediate objects of all cognition, it would appear at first sight reasonable enough to define the percept as the object in its special aspect as perceived. But herein lies an ambiguity. It is true that, in philosophy (or psychology) when we refer to objects we abstract from all but their character as objects. We may apply the term "percept" to objects as treated of from this particular point of view. But it is then co-ordinate, as it were, with the total conception of philosophy as a point of view. It is not the product of any sound analysis of perception. Suppose that, in expounding the theory of cognition, I take as an instance my perception of a letter on my table. It is true to say that in so doing I abstract from anything that may be of interest or importance about the letter outside the purposes of my exposition. But *in that actual perception itself*, although I perceive the object but imperfectly, I make no such abstraction. I see the letter *simpliciter*. I do not see the letter-as-seen. The abstraction must not be allowed for twice over.

There is therefore no *tertium quid* of any kind between perception and the individual thing-in-itself. Neither must we shelve the question by introducing the stimulus in place of the object. This would be a palpable confusion of thought.

It follows from what has been maintained that, absolutely speaking, the object is not really distorted, or coloured, or modified in any way, by the subjectivity of the percipient. It is hard to grasp this conclusion, because when we talk of objects we generally mean simply things as they appear not to any person in particular but to people generally. But that does not affect the question of perception as such. In so far any given person misapprehends a common object, he does not perceive it. If there is any presentation at all, how-

ever hard to determine after the event, it must as such have perfect objectivity and immediacy: and if so it cannot possibly form a point of attachment for anything false: for error is a misunderstanding of both the related terms. In short, our principles compel us to explain the idea of perception through that of truth, not *vice versa*.

We have now arrived at a notion of perception (in its widest sense, including every form of cognitive experience) which takes us by the very pressure of definition—excluding all extraneous considerations—into an ideal and transcendental sphere. This notion is at once just as unavoidable and just as elusive as the geometrical point or line.

Each object of perception, or each percept (for here we may appropriately use the term) is as such unitary, exclusive, and unchanging. For if we apprehend change, the fact of change is itself an element in the percept; which is therefore as such unchanging. Change may characterise the percept, but not *qua* percept. To confuse facts of change with changing facts is utterly to obscure the point at issue. Perception is, indeed, always a complete and unitary fact. It may not appear to be so in the case of mere prolonged attention which reveals fresh features of the same object. But here we must distinguish two points of view. From the one the new facts perceived imply new facts of perception. From the other the whole process is an absolute continuum, or rather all one fact, of which the temporal development is, for our present purpose, merely incidental and irrelevant.

Again, when the same object has been seen several times, the distinct facts of perception merge into one. In so far as they are similar, they are identical. In reflecting upon these facts, we abstract from the varying circumstances under which they occur, the intervals between them, and finally from the duration whether of any one of them or of the period which they all cover. If we do not, then either we regard them as separate facts, or we merely envisage one for our convenience as typical of the rest. As to any differences in the aspect of the object, as seen at the different times, we either abstract from these also, or, again, we regard the facts as absolutely discrete. But if we do so, we no longer regard them even as forming a series; or, to be exact, their character as a series is antecedent to, and irrelevant after, our selection of any one of them for examination as an act of perception. In other words, perceptions are, as such, only differentiated by their content.

Just as present time is not a mere point, but has duration, past and future, from which we abstract for the given pur-

pose, so it is with perception. Present time may be conceived as a continuum, as long as it is an absolute continuum: *qua* present time it must not be divided. Thus we are apt to think of eternity as an all-comprehensive present, and also of the present as a mere point. So, by the help of two complementary abstractions, we think of perception as answering to a *punctum individuationis*, or else as a definitely extended continuum, which, in its final aspect, covers the whole range and the entire duration of conscious life.

A perception, therefore, when we draw out the implications of our reflexion upon it, appears as supertemporal. A perfect continuum is only, after all, a point; and a point, by virtue of having some content, is, from another standpoint, a continuum. We can call it a continuum when we view it as embracing, on its temporal side, a number of distinct occasions, and as the negation *sub specie æternitatis* of their distinctness. We call it a point when we think of it as answering to the individuality of its object. So let it be noted that the continuum does not *contain* the points, but is correlative with them. The notions of discreteness and continuity are not applicable to Reality as such merely in the same manner as they are applicable to any particular series. In the latter case, the discreteness is based on continuity, and continuity is the continuity of the discrete. But the units of Reality contain, each separately, the whole continuum, though in different aspects. These units must not be co-ordinated upon the same plane: for thus their character as absolute units is compromised. And the continuum cannot, like a sensible object, suffer internal differentiation without entirely disappearing. In short, perception has a unitary character which, brought into relation with time, appears either as that continuity of experience which is the bond of all particular spheres of knowledge, and ultimately of the whole conscious life of the individual—the principle of inclusion; or else as a principle of exclusion, corresponding to the being-for-self of the object. But, in fact, from both points of view it answers to individuality, if individuality is indeed the principle of unity which characterises an object, however complete; and is itself capable of being viewed either as exclusion or inclusion. But it would take us too far afield to pursue this line of thought.

We may now pass on to our main line of argument, and through a slight recapitulation proceed to trace the scope of immediacy upon ever-ascending levels. We are at this point in a position to answer the question: How is it possible to recognise a perceptive side to all knowledge, even when per-

ception, both as to its genesis and as to its object, is highly complex and rational, and yet to leave room for the possibility of error? The main answer to this question lies of course in the doctrine defended recently by able writers, that the content of perception is fact. That position has been maintained in this discussion. But we may now treat the subject a little more fully. The impossibility of fulfilling the true conditions of reflexion will give us the starting-point required.

When I correct a past impression, the very process of so doing has a moment of continuity with the impression. In trying the better to grasp its meaning, the percept so far is revived, and its character as past is actually cancelled by my revival of it. And if I also recall and reflect upon the *fact* of that past impression—the impression as a past event set in a context of past circumstances which are also more or less present to my mind—this representation cannot possibly fuse with the revived original percept; and these two elements in reflexion, however mixed up, must be carefully distinguished in analysis. When I regard ideal revival in strict abstraction from any accompanying consciousness of the fact of the original perception as an event in my past, it merges entirely with the original perception. Yet the revival, considered as continued presentation, is absolutely necessary to the reflexion. So much so that these two elements cannot be regarded as merely alternating states, though the key to their true combination is lost. Knowledge of the past fact of the perception is only possible by virtue of a solidarity of the perception with its retention by the imagination; and this solidarity seems incompatible with that contraposition of self and object which reflexion requires. The represented state, as well as the original object, is a presentation or immediacy, until the apprehension becomes in its turn subject to reflexion. It is in the transition from the one plane of immediacy to the other that error is to be traced. It does not exist on any plane of presentation, but in the movement, as such, of the whole. But as error does not enter into our proper subject, there is no need to work out this suggestion.

Without pressing the point, it may be questioned whether these transcendental considerations can permanently or legitimately be kept out of psychology itself. Certainly, for those who accept them, they are a warning against building any philosophy upon psychological abstractions. They point steadily and insistently to real external objects, in some sense or other, and to a real Ego. These concepts, however we may ignore them for immediate purposes, must always be

within call. But this mention of the real Ego leads to a further step in our inquiry. Although it is involved, surely, in the realistic view of percepts, we may also establish it by considerations illustrated by the very method of our discussion itself.

We who believe in a real Ego are accustomed to trace its implications in the organisation and unification of our lower perceptual knowledge,—apperception, in the Kantian sense. But, so far, this process may seem, as it did to Kant, to require the regulative idea of a real Ego, and not its actual existence. This may stand so long as the idea of the apperceiving Ego, and that of its *totum cognitum*, remain the terms of an ultimate reciprocity. But just because we can thus regard them as merely regulative, they at once become relative to the individual Ego that correlates them for the purposes of its own intellectual and general satisfaction. This cannot be said to be merely included in the first correlation, for the latter as a whole is relative to the correlating Ego. For we must bear in mind that the unification by or in the Ego of the contents of its consciousness, is a correlation not of self and not-self, but of subject and object. The contents of the mind, even as such, fall on the object side; so the very process of their projection furnishes continual fresh material for itself. We are driven back *ad infinitum* upon higher levels of apperception, in which the positing Ego of a moment ago becomes itself an object posited in the same manner. If we do not fall back upon this higher apperception, our very attempt to unify our consciousness produces only a fundamental cleavage. The two terms, however merely ideal and regulative, are at least regarded (however inconsistently) as if they were absolute and hypostatic, and as such they do not rest upon common ground.

And even though we may adopt an empirical or Sensationalist standpoint, the same unfathomable selfhood appears, as soon as we reflect upon that standpoint. For though the Ego may appear disintegrated by the denial of any inward connexions of its states, yet the very doctrine of relativity demands an individualism which has a suicidal implication of absoluteness. It can get rid of the Ego that the Sensationalist dissects, but not of the Ego that the Sensationalist is. His philosophy must itself submit to the relativity that it proclaims, and it can only be relative to himself. So we get the indefinite regress as before.

Whoever makes any allusion to an Ego or self may justly be called upon to explain what he means by the term. And it must have a meaning antecedent to the use that he makes

of it. If we accept it as an intuitional datum, it certainly has appeared prior to any analysis of consciousness that may use it, and will survive to the end. Otherwise, we may postulate it as a regulative idea; but then, as we have seen, it must be postulated again and again *ad infinitum*. When we posit a self for which all the content of our consciousness exists, we create a new situation, which must be dealt with in the same manner. This method is not unsound; nay, just because it is positively inevitable to bare abstract thought, it reveals the unfathomable depth of the Ego. And this amounts to a surrender to intuitional Realism. For it is quite enough that abstract thought is unable to get rid of the Ego. It leaves us to conceive it as real without let or hindrance; for the merest suggestion of the invalidity of the notion would have to rest upon a positive ground of doubt; and if no such ground is afforded by abstract thought, then there is none at all. Intuitionalism, by its very meaning, is its own support, and can always throw the burden of proof upon its opponents. And the fact that it is impossible to get rid of the real Ego except by arbitrarily arrested reflexion leaves it as a secure possession for all who claim it as a datum of consciousness.

Returning now to the subject of perception, we cannot fail to see how, upon these principles, the implication of a transcendent Ego forms the middle term between any perception and our subsequent reflexion upon it. When I disengage the fact of a past presentation *as* a fact from the mere continued apprehension of the object, I view from without, not merely the presentation, but my own Ego. This appears so soon as the reflexion itself becomes subject to reflexion. And if it be questioned whether we are not thus, in our second reflexion, guilty of the psychologist's fallacy, I reply that in raising this question we are only falling back upon yet a higher plane of reflexion. Each plane is true relatively to what is below, and is itself relative to the plane above; while our very recognition of this regress establishes a theory of reflexion and perception as only relatively distinct. Each plane has its element of truth, which, if it answers to the exigencies of the concrete social individual in the given situation, is by consequence the essential element, and the idea is essentially true. And note that we do not at each stage move farther and farther away from the original perception, but rather draw out its implications and correct the inadequacies of our earlier interpretations of it.

Now, it follows easily from all this that the Ego must be conceived as transcendental, not only in respect of con-

sciousness as a whole, but in respect of each fact of perception. For to attain to that synthesis of continuity and contraposition which is the implication of the meaning of perception, in any one instance of its occurrence, would be nothing less than to realise our transcendental and eternal selfhood. So we may speak of that selfhood as implicated in every perception; always remembering, however, that this form of expression is merely relative to our temporal position. The eternal self is actual; and it is just because the temporal self is an abstraction, that the latter cannot extricate itself from the contradictions of its abstract standpoint, so long as it elects to live and think without adequate acknowledgment of the fact of its own abstractness. I think it is very important to recognise an ontological as well as an epistemological meaning of the term "abstract".

The above is a doctrine of the immanence of the Ego in its states. The soul-essence is not behind its manifestations, so long as these are regarded, not in groups, but in respect of their totality: it is *in* them. And yet it is also a doctrine of transcendency, when we have regard to each separate state, and even to the whole temporal life. It may claim therefore to be a solution of an obstinate antinomy. And these characteristics of the Ego have been reconciled by tracing the implication—in the sense just defined—of a transcendental, or eternal, sphere of experience; and this experience is not merely postulated but connected with memory and discursive thought on a definite principle to which we are led by the very meaning of perception. This principle I have endeavoured—in a hard struggle with the limitations of verbal expression, and my own in particular—to set forth and defend. It may seem paradoxical to ask for belief in actual, not merely potential, selfhood, existing in its own sphere of perception, yet really one with the temporal self that lives a separate life. But so long as we avoid inconsistencies we need not be afraid of paradoxes. In this case we have only to remember that the principle of separation lies on the side of the temporal self, the principle of unity on that of the eternal. We can thus think, for instance, of death, not as a projection to a strange sphere, much less as a shock that weakens the continuity of personal existence; but, on the contrary, as an expansion or an awakening. Such a thought is, of course, an old and very familiar one; but in this article I have endeavoured to indicate the real principle of the continuity between the lower and the higher plane of personal life, as well as to vindicate the reality of the higher.

A final word upon another aspect of our conclusion.

Philosophy, regarded as reflexion upon reflexion, is in truth a restoration of immediacy. We may arrange a scale, roughly, as follows:—

1. Sense perception.
2. Reflexion, as in ordinary life, upon percepts; that is to say, revival with some sort of consciousness of the subjective conditions of the original perception.
3. Reflexion upon perception *as such* (as in psychology, and in such philosophy as uses psychological abstractions without criticism).
4. Reflexion upon reflexion as such, which should lead—on these principles—to the recognition of a limitation which may be expressed either (*a*) as the impossibility of eliminating the present personal equation, or (*b*) obversely, as the impossibility of reaching the absolute inwardness of past mental states.

Now, in each case reflexion itself is, as it were, a perception: it has just such an immediacy as perception has; and it can be corrected afterwards only in the sense in which perceptions can be corrected. Reflexion thus appears as the superposition of different planes of perception. And, so regarded, it is not the conscious application of principles which the mind brings with it over against its subject-matter. For the subject-matter at each given stage embraces the *totum cognitum*, internal as well as external. This, envisaged as such, is an immediacy. We open our eyes, so to speak, upon the presented complex—our universe, psychic and external; we make it an object of attention. But in this very act the presentation is transformed. The subject-object relationship asserts itself further back, as the presupposition of this very fact of apperception. Thus knowledge never for an instant drops the thread of immediacy. And, indeed,—as modern psychology recognises—there is no form of knowledge which cannot be described, from one side, in terms of immediacy. We have feelings of relationships: of meanings: of truth. And such feelings provide their own standards,—set and answer their own problems. We simply rise (if we will to rise at all) to higher levels along the line of a self-transforming immediacy. We can impose nothing upon the presentations which they do not disclose from within themselves as we view them from ascending planes.

We need make no attempt to get outside this feeling-sphere. The sense of relativity which troubles us only provokes the consciousness of an absolute standard, and this consciousness continually empties itself into the total presentation: for the very suggestion of subjectivity is itself subjective, and we

speedily perceive that it arises from that very feeling-total which it leads us to suspect. All we need is to preserve the totality of the presentation by a continual self-projection into it, whenever challenged; and the distinction between the relative and the absolute standard is transcended. And this movement within immediacy is at once the complement and the justification of the rich and fixed possessions of intuitional life.

The antinomy that confronts reflexion in respect of its subject-matter, already discussed, applies to all planes of reflexion, and so to philosophy as such in its attempt to interpret life. The more thoroughly it investigates the root of Being and Thought, the more this antinomy comes to light. The philosopher's subject-matter is never a proper subject-matter, for his handling of it is itself a part of it; he is continuous with it: and therefore the reciprocity of true presentation is absent. Or, viewed in another light, it is outside himself in such a way that he cannot see *into* it: for he views that which is by hypothesis a concrete whole from an abstract and formal standpoint. This is true of all abstract thought that consistently endeavours to understand first principles. I will not here discuss the consistency of Empiricism in dealing with them at all.

But, as I have tried to show, there is a way out of the difficulty. We may make this antinomy itself the very principle of our construction. For though stated formally, it seems to throw us back upon an endless regress, it reveals a continuity of experience, a line of immediacy which is the line of truth. If the pure ratiocination moves on in its breathless course and never allows us to sit down and contemplate, yet wherever along this line of immediacy we *can* contemplate, we *may*. For immediacy is just the principle that reason has vindicated—to its own embarrassment: and the apparent stress to which we have seen reason reduced in consequence of this vindication, in reality only vindicates the vindication. For if pure reason is not truly constructive, then it has no goal of its own: that is, its only good is the confession that it has none. And just as I have maintained that on the first plane, perceptions are not as such the material of thought-construction, so, on the plane of philosophy itself, thought can only discover, not produce. Its crowning synthesis is yet an experience, a presentation. And the regressive process itself takes place within the whole of experience, and is itself experienced. We should never discuss it at all, but for the sake of fixed ideals and abiding purposes for which we think and live. In this process itself we cannot,

of course, get outside philosophy. But philosophy itself is *in us:* it is an element in our entire spiritual organism.

This method touches empiricism, especially of the type of Prof. Dewey's, on the one side, and speculative Rationalism on the other. Yet it is to be sharply distinguished from both. Keeping close to experience throughout, never seeking to explain content through form, it is yet not satisfied to trace the line of experience along one level: it ascends by a process of subsumption of lower planes into those higher planes which their very completion reveals; and meanwhile self-consciousness, neither abstracted from experiences in general nor dissipated among them, makes a corresponding advance, at once reaching new depths and winning new content. Unlike empiricism, therefore, we deal in experience-totals. The *totum cognitum* of each moment is itself a unit, though, when recognised as such, it is at once taken up into a higher unit. Our movement is analogous to geometrical, as distinguished from arithmetical, progression. In this way it is at once transcendental and experiential.

And so, on the other hand, it is no variety of Hegelianism. It does not fail us in face of the antithesis between the temporal and the eternal order. It is essentially a movement of the matter of intuition. The time-order is not a sphere of expression for a timeless logical process. It belongs to the very principle of that process. And at the same time, by virtue of our intuitional basis, we can include the temporal order in the eternal, as Rationalism, abstracting from the varieties and movements of experience, can never do. Our Absolute is thus no more Spinozistic than it is Hegelian.

Thus, not content with finding organic unity through and in philosophy, at length philosophy itself enters into organic union with the general sphere of experience as such. And within experience itself there is an unbroken continuity between the content of sense perception and that supreme cosmic intuition which, in one form or another, constitutes the spiritual being of man.

IV.—PRAGMATIC REALISM.

By D. L. Murray.

I.

The worth of a new philosophy must be tested by its efficacy in solving old problems, which have hitherto proved obstinate. Pragmatism least of all philosophic methods can be slow to accept such a challenge. Its claim to 'truth' is a claim to usefulness, usefulness in clearing up philosophic perplexities, at least wherever these perplexities spring from questions of vital human interest.

The perennial controversy between Realism and Idealism invites the application of pragmatic principles. In its old shape it promised to be as interminable as it was unprogressive. The Idealist theory grew to be the parent trunk of a large philosophic progeny, whose intestine discords it must be said rather discredited the family. Over against them each generation produced its New Realisms to carry on the stubborn fight.

This pertinacity is not surprising. The point at issue could not well be weightier. What we believe to be the ground plan of the universe is in question. Are we, as Realists advise, to stand at awe-stricken attention, in a pantheon of immutable eternal Realities? Or shall we say with the Idealists that it is our fate to contemplate the unfolding of a Universal Mind of which our 'realities' are but the passing fancies? Or can we dare to believe that men are more "masters of their fates" than is consistent with either of these outlooks, and that the world may some day be to us very much what we can make of it? However these questions may be answered it is our eternal destinies which are at stake. Our hopes of the future depend on the view[1] we take of our powers and prerogatives in the scheme of things, and not less on our convictions as to the intimacy or foreignness of the world at large, the chances of its being rationally ordered by the work of a purposive activity. Considerations

[1] More accurately on the conduct which results from our views.

of this kind force the Idealist controversy prominently to the front, and any fresh methodological doctrine must burn to exercise itself upon it. Hence the inquiry which must now become our theme.

II.

At the very outset of investigation we come upon a standpoint known as 'naïve realism'. It means the realism of everyday life which we all share, upon which we are dependent for our ordinary estimate of things. It has been admirably described by the newest expositor of New Realism, Prof. Fullerton of Columbia University. He says:— [1]

"It can scarcely be regarded as without significance that men generally find themselves compelled to distinguish constantly between ideas and things and to mark the distinction by using different expressions when they are referring to the one or to the other. Every man would regard it as absurd to talk of a dream image confined within the walls of a real material bottle, of an imagined knife lying upon a real table, of his neighbour's percept (assuming him to know what is meant by the word percept) transfixed and held up to view on the point of a fork."

And he goes on to show how important a part 'things' as distinct from 'thoughts' play in constituting experience when he declares:— [2]

"It is to a knowledge of this order of phenomena (*i.e.* the order of objective realities) that physical science endeavours to attain. It is position in this order that we try to determine when we ask regarding the place and time of anything. All our measurements come back to this. When we ask how big an object is we do not mean to determine how big it looks to this man or that under these circumstances or under those. We refer to its size relatively to other things in the physical order. And when we ask when something happened we always refer to this same order. How shall we measure the time which has elapsed since Columbus discovered America? By physical changes; by revolutions of the sun. How shall I measure the time which has elapsed since I sat down at this desk to write? By looking at the clock before me."

Passages like these which place in so clear a light the truth that in life we have to reckon with an 'other,' a

[1] *Essays Philosophical and Psychological in Honour of William James*, p. 9.

[2] *l.c.*, p. 15.

something outside our immediate control which we cannot shift about the board as we can our ideas, passages like these are enough to enamour a pragmatist for ever of Realism. The contention of naïve Realism is indeed undeniable so far as it goes. But Prof. Fullerton himself admits that it will not go all the way. He concedes that[1] "as our experiences of things differ according to the relation of our senses to them, so we have every reason to believe that the experiences of different minds differ. The colour-blind man does not see what I see. The experience of the world, if we may call it such, enjoyed by lower creatures in their descending series probably varies more and more widely from my own. What the world may seem like to possible higher creatures I may try to guess, but I can be sure of little save that a difference must be expected. Does it not seem true then that what the world is perceived to be is a function of the creature experiencing the world. . . . There appear to be so many external worlds all unlike each other and each chained to the senses of some perceiving creature. Where in all this is *the* world?"

This fatal short-coming of naïve realism is thoroughly brought out by another writer in the same volume, Prof. Miller. He points out that—[2] "matter is a realm of aspects and these aspects congenial enough in succession and alternation will not fit together to form in one total a coherent world".

A writing desk (*e.g.*)—[3] "as a light brown total or unit, the desk as a complex combination of drawers and compartments to the right and left, the desk as a wilderness of wood fibre, the desk, if you will, as a host of ordered molecules or atoms, are different desks and will in no-wise go together. . . . The incompatibility is logical. A continuous polished brown surface is not a fibrous or a granulated surface. A marshalling of what we scientifically mean by molecules is not that we familiarly mean by a desk."

And he concludes most justifiably:[4] "My only reason for not accepting naïve realism as a sufficient metaphysic of matter is that there is no such theory. It is more naïve than we thought."

We may feel sure then that Metaphysical Realism will not smoothly be deduced from the everyday realism which, as pragmatists, we so heartily accepted. And—alas!—we shall find that most attempts hitherto made to deduce it lead to conclusions from which the pragmatic spirit recoils in

[1] *L.c.*, p. 31. [2] *Ibid.*, p. 256. [3] *Ibid.* [4] *Ibid.*, p. 258.

dismay. Let us consider some of the methods which may be adopted.

A. Let us take first a line of Realistic argument which is the simplest, the most uncompromising and the most repellent of them all. Experience, it is urged, reveals objective realities, although it teems with impostors. The business of unmasking these is tiresome and perhaps hopeless. None the less the realities are there all right underneath. Nobody may ever get at any of them, but they are there none the less for faith to grasp. They are singularly like the display of fireworks which Ko-Ko told Nanki-Poo would signalise the night after his execution. "You won't see them, but they'll be there all the same," he said reassuringly. The Realist comforts himself with the reflexion that there may be countless realities which no one knows, and which no one ever has known.

This attitude is very depressing to non-realists. Idealists at any rate have always felt it to be so. But it was really hopeless to argue. If people wish to hunt "Snarks," why shouldn't they? Is it not their own fault if they come upon a "Boojum"? The right course is cheerfully to invest the Realist with the ownership of as many acres of Never-Never-Land as he may demand, and then persuade him to return to business and treat of Reality as known. No genial mind tries to put a stop to the making of innocuous fairy tales. Only in philosophy, if we mean to get on, we must adhere to the methodological postulate that what can't be known shan't count. As Prof. Fullerton himself puts it:[1] "The Realist should frankly admit that the only external world about which it can be profitable to talk at all is an external world revealed in experience". A Pragmatist will cordially agree, and methodologically assume the right to describe an 'external world' about which it is not "profitable to talk at all," as "non-existent" for the purpose of his inquiry.

B. We fall back then upon those Reals which are not too shy to unveil to us, and again we are met by the tantalising problem which of the 'perceptions' belonging to me or any one else are genuine revelations of immovable Realities, and which are subjective, mere appearances, hallucinations. It would be a cause of joy to the Realist (but not equally to a Pragmatist who was dissatisfied with things as they are) if the true Realities were unmistakably hall-marked to prevent fraud and delusion. But *dis aliter visum*, and the Realist

[1] *L.c.*, p. 35.

must retire upon his postulate that there is somewhere amid the froth of appearances (probably at the bottom) a solid rock of Reality, eternally valid and impregnable.

This postulate however lies exposed to the following criticism. It can only be used in two ways, and of these the one is futile and the other destructive of the progress of knowledge.[1]

(*a*) The first way of using the postulate that there is an absolute Reality is as follows. We may believe that it exists but hesitate to identify it with any of the 'realities' which our discoveries from time to time propose to us. This we may do bearing in mind that the nature of scientific reality is, as Dr. Schiller says,[2] "not rigid but plastic and capable of development; not absolute or unconditionally real, but relative to our experience and dependent on the state of our own knowledge, while our conception of it changes and so often reduces to unreality what had long been accepted as real".

To quote an incisive passage of Prof. Dewey's[3]: "Historically in every scientific inquiry there has been relegation of accepted meanings to the limbo of mere ideas; there has been a passage of some of the accepted facts into the region of mere hypothesis and opinion. Conversely there has been a continued issuing of ideas from the region of hypotheses and theories into that of facts, of accepted objective and meaningful contents." This progress he reminds us is "an absolute monstrosity from the point of view of the epistemology which assumes a thought in general on one side and a reality in general on the other".

The moral of all this is that it is better to leave the Absolute Reality hypothesis discreetly in the background, and not to stake its reputation upon any particular fact which may crumble under the weight of so tremendous a claim. But if this is so, is the postulate any less ornamental than the archaic cannon which adorn the ramparts of our old castles? Should we be able to use it when real fighting is the order of the day?

(*b*) If on the other hand we do boldly utilise it, it acts as a deadly guillotine on knowledge. The 'facts' upon which it has descended immediately lose life—and decline hence-

[1] *Cf. Studies in Humanism*, p. 214.

[2] The inquiry paragraphs are a condensation of the arguments of No. 8 of Dr. Schiller's *Studies in Humanism*.

[3] *Cf. Studies in Logical Theory*, p. 12.

forth to disintegrate themselves, when required, into other syntheses. They remain stark and stiff where they were struck, and you can never stir them up to take their part or remove them to make a better order. For are they not eternally real and is not that enough? Thus it has actually happened that a thick fog of sterilising conservatism has settled down upon the field of philosophy. It impedes the progress of the new Humanist method not by argument but by anathema. We see herein the postulate of Absolute Reality in action. It is impious scepticism to tamper with any Absolute Reality once accepted, and insolence to inquire into its paternity.

III.

But at this point we may justly be checked. The difficulties inherent in naïve Realism, it will be said, are not removed by tilting at other people's solutions. Prof. Fullerton's question may be re-echoed. "There appear to be so many external worlds . . . Where . . . is the real world?"

Can we not reply, "Nowhere as yet"? Has every man then got his own? What if he has? Why should we be upset by the gorgeous spectacle of multitudinous estimates of reality? "Every man his own world" is a good enough position to start from. Of course it can only be a jumping-off ground. Unless we wish to be philosophic Robinson Crusoes we must set out to build up a common world: but we need not build a skyscraper. Jerry-building is likely to be as unsatisfactory here as elsewhere. How is it possible to decide between the man we call 'colour-blind' and ourselves —and is it necessary to effect more than a compromise with him? There will be no difficulty until we come to the social problem of making him recognise (say) a red danger signal. Then, to meet that practical case and for those circumstances, we shall have to persuade the colour-blind man that he is wrong—wrong that is from the pragmatic not the absolute point of view, wrong because he cannot effect a practical adjustment which we can,—wrong on the railway line, not wrong at the bar of the Eternal Truth.

This is a fair specimen of the way in which we may conceive the objectively real order of experience to grow up. The 'real' thing is a coincidence of various people's perceptions, similar enough to enable them in practical life to speak of perceiving the same. Such a serviceable coincidence of perceptions may well (and for practical purposes must) be called a single real object; only we must be scrupulous to not let it crystallise: we must keep it sufficiently plastic in

idea to admit of having new developments assimilated to it and obsolete elements in it purged away. Thus to recur to our example, should the colour-blind perish from the face of the globe, trees would be 'unequivocally' green where now they 'really' (if we wish to be accurate) partake both of greenness and (to the 'deranged' colour sense) of greyness.

Instead then of idolising certain people's aspects of reality or arbitrarily putting a premium on certain of our own varied perceptions (saying for instance that the 'real' blade of grass is the one seen through the microscope and not the one seen at the entrance to the field), instead of plunging into this confusion, let us make bold to conceive a 'reality' sufficiently tractable to bear all these aspects—each in its proper place.

For of course it would be disastrous to draw no distinction between the 'real' and the 'unreal'. Only whatever the reality we predicate, it must be held to be related to the purpose and context of the judgment. When I want to paint a picture, the real grass is the grass I see looking at the field from a determinate distance. The real grass for the botanist is the grass held a few inches from the eyes, or as looked at under the magnifying glass. The fixation and harmonisation of these different aspects of the real, each reached by a purposive course of activity, will in the end form my settled objective reality, while from the wider standpoint—since I desire to share my reality with you—objective reality will be the product of an attempt to fit my reality together with yours so as to satisfy us both—though probably we should both be content with something less than completely identical reality,—which would be a state of things as dull as it is impossible.

But here we may be accused of going back on the originally admitted distinction between 'thought' and 'things'. The process we have described, it may be said, would serve well enough for an account of the manipulation of our ideas so as to get people to 'think the same,' but you cannot treat reality in that way, for reality is something independent, which resists assault as often as it submits to be moulded. Well, it is perfectly true that the external world is 'resistant,' but there are no indications in it as to where precisely in its composition the granite is mixed with the sand; nor have we any reason for thinking that it is anywhere of adamant. And so methodologically it is better always to assume that the particular bit of it we want to change is susceptible of change. We find out by trying; though often, no doubt, we do accept particular objects as practically indissoluble for us. To believe that reality must just be 'found' by every one and that nobody can alter it, is only the result of a postulate,

and it is as reasonable to postulate a hard-headed man operating on a 'soft,' as a 'soft-headed man operating on a 'hard,' reality. 'Not quite,' it may be replied. To some extent reality may be changeable and different for individuals. But there must be a fixed law somewhere, otherwise reality would be as subjective as ideas, and by being 'all things to all men,' end by becoming contradictory and nothing at all. Reality may be at bottom what Aristotle called ὕλη, potentiality mainly,[1] waiting for us to work it into shape. But it cannot be potentiality and nothing else. To be anything it had always to be something, and it cannot now tolerate contradictory theories as to its essence without becoming nothing again.

There is much force in this contention from a metaphysical standpoint, but we are approaching realms whose pragmatic interest is slight. Is not this πρώτη ὕλη, which we never meet with, almost as negligible as the unknowable reality we had previously rejected? Might we not be lazy and refuse to adjust innocuous contradictions between the views of A and of B so long as it works for A to think a thing to be (M) and works for B to think it to be its opposite (N), seeing that metaphysics has not yet been evacuated of all puzzles. Moreover is not strictly what is called a 'contradiction' merely a conflict of opinion about a problem not yet solved? A thinks reality should be called M, B insists that it should be N, but until they get to the end of knowing, who can tell? Anyhow it is no harder to think reality in this sense contradictory than to be asked to contemplate either the creation of the ὕλη or its eternal existence.

Or we might take refuge in an ultra-pluralistic metaphysic and believe that every self actually had its own world and that we just telegraphed our movements to each other, as men might do while encased in submarine boats of similar pattern.[2] Of course such a philosophy would present 'difficulties,' but so do the established metaphysics. A difficulty does not grow less real, though it may grow less annoying, as it grows older (a truth which intellectualism seems unwilling to acknowledge). The point is that it is better for a system to be methodologically fruitful and metaphysically tangled than to be metaphysically elegant and methodologically impotent.

Actually however the recognition that the πρώτη ὕλη which we make into reality is susceptible of much variation

[1] See Dr. Schiller in *Personal Idealism*, p. 60.

[2] *Cf.* Mr. Bosanquet's "panorama" metaphor, *Essentials of Logic*, p. 14.

need not drag in its train metaphysical confusion. For though what we call 'matter' is no doubt of rigid character, yet if 'matter' be only a result of the interaction between selves and cosmic forces, or better still between selves and cosmic personalities or a single personality, the scruple vanishes. For the Force (x) interacting with one person may set up a different result from what it does when it interacts with another person. And more obviously the same person may be an angel to you and (alas!) a tigress to me!

At any rate the value of the pragmatic method is not lessened by assuming that the reality we have to deal with has rigid mountain ranges of its own and won't stand just anything from us, for we are certainly at liberty to believe that if we will only set to work there are highways to be made in it down which every reasonable desire may march to its fulfilment.

IV.

If by development on these lines we can transform naïve realism into a philosophy satisfactory to us, it will clearly be unnecessary to go into the complications of idealistic attempts to solve the problem of Reality in itself. Idealism only seems to put back the ultimate unintelligibility, in which all systems end, a step or two—and these steps seem a waste of effort.

When we had referred reality back to *πρώτη ὕλη*, we confessedly rested on a conception which would not bear much resting on. If it was anything more than an ideal limit to the infinite regress involved in the search for causes, it was nothing we could describe, since the moment we came to know it it would need to be taken up *ipso facto* into the subjective purpose-driven functioning of mind in which it was re-made. Like Mill's 'permanent possibilities of sensation,' the *ὕλη* amounted to a mere idealisation of our present processes of working over our experience. What then do we really mean when we say that there once was a 'glacial epoch'? We only mean that our experience now is such that it is best explained by a belief (pragmatically confirmed in every moment of our lives) that reality has had a history and that a glacial epoch occurred in that history. This painful experience therefore would presumably have been ours, had we entered into the world process at that stage, and this whole history is so essentially knit up with the reality of our present world, that it is as real as it and as real as we.

The Idealist however professes to give us something far superior to such a mist-wraith as this *ὕλη* seems to be. A

mere potentiality, he sagely observes, is in effect nothing. (Aristotle has said so, and he sees it.) He then propounds to us a Universal Thinker accompanying the whole march of cosmic evolution by marking time. By this metaphysical aid such primitive astronomical projections as (to quote Dr. Rashdall) 'the molten planet or the contracting nebula' may pass from the disputable rank of possible experiences to an assured position in actual experience. But are not the gains of such a theory too illusory? If we could take it for granted that the Universal Mind viewed its reality in all respects as we view ours, we might possibly speak of the 'glacial epoch' as actual and our views thereof as rooted in reality by the vicarious meditations of a Universal Mind. But since of the minds we know no two take reality quite in the same way, do we not need some further assurance either that the Universal Mind's view of the 'glacial age' validates the views of any one of us by coinciding with them, or that it embraces those of all of us, or that it can embrace even any of them? The first alternative would imply that some fortunate (but happily undetected) mortal had attained to absolute truth on the matter; but this would only hold out an infinitesimal hope of confirmation to any one's view, and anyhow seems hardly probable, and is certainly no necessity of thought. The second seems hardly compatible with the personality of the Universal Mind, and indeed seems impiously to degrade it into the universal receptacle for all thoughts, however wicked and foolish. The third is suggested by the difficulty of understanding how a Universal Mind if it is conceived as timeless, as so many Idealists insist on conceiving it, can think such things as 'glacial epochs' at all.

The obstinate old problem, which intellectualistic Realism failed to resolve, here sweeps back upon the intellectualistic Idealist. The contradictions inherent in the collective experience of men are as perplexing as ever. To suggest, as Idealism seems to do, that they are clumsy attempts to cognise through a veil darkly the pattern-world seen by the Absolute immediately opens up again the black gulf ('Plato's chasm,' Dr. Schiller has christened it) between things as they truly are and things as they truly seem to be, may be, and somehow (it is declared) must be, a gulf which epistemology is invoked to fill, but which hitherto has gaped unpropitiated by the sacrifice of scores of philosophic Curtii. In effect you may call your ideally unified reality an unknowable thought instead of an unknowable thing—but what advance have you made thereby? Just as our Realism admitted that the imagined sum of individual experiences would combine

into no conceivable world, so must not Idealism grant that the Absolute experience, in which all our different ways of envisaging our surroundings are reconciled, would be nothing either knowable or experienceable by us? The epistemological surd is not eliminated. Herein intellectualists, whether Realists or Idealists, fall under the same arraignment. They try to explain the known by reference to the unknowable—an unprofitable quixotism.

Our own πρώτη ὕλη involves no doubt the mystery of all beginnings, but then it is a mystery which may be cleared up in the end because every step in the progress of humanity does something to clear it up. The jolts and discordances which prevent men from understanding each other are in the eyes of pragmatic realists only symptoms of a work half done—intrusions of a ὕλη not yet forced into harmonious shapes. The difference between the humanist and idealistic position comes to be this. Humanism starts from the known and evident to man and thence purposes by clear and easily-tested courses (*viz.*, the method of working out individual cognitive satisfaction) to reduce the irrational in the experiences of society to harmony and order.

Idealism on the contrary starts with an ideal it has somehow jumped to, and, when it tries to interpret our facts thereby, finds antinomies which baffle it. It comes then in the end to declare that the intruding fragments of the Absolute's own hidden cosmos must not be expected to operate successfully in the chaotic gloom of a phenomenal shadow-world. They are true but useless, too good to be true of our experience. Human knowledge, useful knowledge, which fits us like a glove, and enables us to control things effectively, is at fault. It is mere appearance, the clearer it looks the more illusory it is. Our only salvation is to take refuge in what we can never quite attain, and to lose ourselves in the splendour of the Absolute Experience. Our faith may then be justified by insisting on the short-comings of human knowledge and on the self-contradictoriness of appearance; and thus we may finally condemn as tainted by ultimate incoherence, all we seemed to know, all that gave us the notion of reason and truth, *viz.*, the whole effective knowledge of phenomenal reality,—of the world in which we actually live.

This point must be relentlessly pressed home upon Idealism. It is an extraordinary paradox thus to put the explanation of the cosmos in its hyper-cosmic elements. For if the Absolute is to be kept 'pure,' it must steer clear of humanity. Yet if it is to be really absolute, it must really include the totality of reality, all the crimes and horrors, the

follies, errors and illusions that are and were and ever shall be. If then it is to be identified with God, does not a most repulsive notion of the Deity ensue? God is there to account for the least valuable portions of experience, *viz.*, those which the selective nature of human thought has rejected. They are God's concern just because they are not ours. Whatever we have no use for, because we cannot handle it, we relegate to his care. But who can feel any true reverence for a deity whose chief attribute is the power of retaining the rubbish, which the progress of thinking casts aside? Furthermore since the days of Plato Idealists have added enormously to the duties and degradation of the Absolute's post. For the whole mass of opinions or errors, fantasies, fads, crazes, madnesses, not to mention the whole mass of vice which is 'ignorance' (which Plato in his desperation tried to ascribe to a 'matter' which 'was not'), have now to take up their eternal abode in the Absolute's bosom. Not only is he all-knowing of the discords of the universe, he is also the impartial sustainer of whatsoever thoughts and things human minds can no longer waste their time over. Surely it is better to keep 'God' pure from such contamination. Is not even Aristotle's god, who resolutely concentrated his attention upon his own perfection and was incapable of taking cognizance of anything inferior, is not this celestial Superman a worthier object of worship than an Absolute whose all-inclusiveness turns him into a dust-collector of the universe?

Whatever may be thought of this, the epistemological defect of Idealism, *viz.*, its irrelevance to human thinking remains. It is worth while on this head to recall the admissions of even so moderate an Idealist as Dr. Rashdall. He grants that such terms as pleasure and pain applied to his personalised universal thinker are but symbols, and adds:[1] "But then so I should contend in a sense is thought". If we admit that in any sense the Universal Thought is not as ours, do we not throw an incalculable doubt upon the stability which the Absolute was invoked to impart to our mental constructions?

Idealists may still urge that it is better to refer reality to some kind of thought, even to one not strictly knowable, than to a matter which *ex hypothesi* lacks every quality of the matter we actually come into contact with. But how far does Idealism really dissipate the obscurity which hangs round the notion of a 'reality not-ourselves'? For if that idea

[1] *Personal Idealism*, p. 387.

fades when cut adrift from the notion of a thinking subject, so equally does the idea of an objectless mind collapse, if we try to fasten attention on it. The Absolute Mind then must throughout its existence have had objects: it could not have created them, because without them it would not have been a mind. Objects therefore could not have come into being by the creative will even of a Divine Mind: they must have existed eternally. But if so, may not the Divine Mind itself be forced to take a realistic view of the eternal objects with which it is confronted? How could it, even as described by Idealists, be an Idealist itself?

The application of the Pragmatic Method to this persistent controversy shows how truly Prof. James declared it to be a mode of settling metaphysical disputes which would otherwise prove interminable. The Pragmatic orientation of mind lets in daylight upon most confusions. In this instance we have turned away from the empty debates about the void where thinking ceases and consistently weighed reality by its importance to ourselves. That was why we championed naïve Realism, with its practical distinction between 'thought' and 'things'. Dismissing then as useless for human purposes, the query what reality there was beyond the realm of knowledge, we faced the more pressing difficulty, inherent in Realism, of how it is possible to believe in a real world in face of the conflicting individual variation of the world's contents. This perplexity we resolved by acknowledging the validity of every presentation of the universe, so long as it satisfied its individual holder. That this theory does not lead to individualistic anarchy we showed by drawing attention to the *de facto* resemblances in our private estimates of things. These we urged constituted a common world, formed or in process of formation, and we hinted that part of life's ideal was the extension of these possibilities of common action—only uttering a warning against the suppression of personal interests for the sake of mere 'uniformity of Truth'. The plastic view of 'reality' thus enounced we illustrated by use of the symbol or 'ideal limit' of πρώτη ὕλη derived from Aristotle. This πρώτη ὕλη we considered a simpler way of expressing the mystery of the 'beyond' than the clumsy idealistic device of an Absolute Thinker, who drags in countless difficulties of his own and epistemologically only throws doubt and discredit on all our knowledge.

Pragmatic Realism appears then as a blend. It borrows from naïve Realism its fundamental distinction between thing and idea, from idealism its view of the dependence of our reality on our thought (which however it construes

voluntaristically). It rejects the common Realisms and Idealisms, alike when they fall into either of the errors of (1) denying that facts are 'facts,' *i.e.* made things—and therefore plastic—and asserting that there is an absolutely rigid and eternal order of matter or idea, or (2) building in extra-experiential regions, hiding the key to the problem of error in the unknowable.

In protesting against these fallacies, pragmatism only returns to its main quarrel with intellectualism and registers once more its protest against a method of thought which is rapidly stultifying philosophy by scepticism.

V.—KNOWLEDGE AS PRESENTATION.

By Helen Wodehouse.

The phrase "presentation-continuum" represents one of the most valuable suggestions in psychology, and one whose values we are still far from having worked out to the full. Especially, it would seem, do we fail to make full use of it in that part of psychology which ought to overlap logic and the theory of knowledge. Yet, the more we explore the conception, the greater bearing does it seem to have on several interesting problems belonging to these sciences; and I propose in the following pages to take a text to which most English psychologists at any rate seem to have no objection, and see how much logical interest can be got out of it. The text is, "Knowledge consists of the presentation of reality in consciousness".

I. Let us take first the term in this which is most obviously momentous for epistemology. We say quite lightly that *reality* is presented, and I suppose that few modern philosophers would explicitly deny the statement; yet our philosophy is apt now and then from sheer habit to slip back into ways of speaking which are inconsistent with it. If what is presented to us is always reality, we must assume no shifting world of intermediaries between us and the real. What meaning, then, can we usefully give to the word "idea"? The answer comes from those psychologists who protest every now and then that an idea is not a thing but a process or event. The primary fact is the presentation of reality; an "idea" will be simply the event of presentation. Its "meaning" will be just that about it which is interesting, *viz.* the reality which is being presented. And the phrase "idea of a thing" becomes a general name for the presentation of that thing in thought-consciousness. "The idea of a Utopia is very old" means that a Utopia (not the idea of it) was first presented in thought a long time ago. "The idea of Charles I. as a successful ruler is absurd" means that these two realities can never be so presented together as to work harmoniously with each other and with the other realities of history and political science.

Reality, then, is not our idea, simply because it cannot be the event of its own presentation. Our ideas are not reality, but only for the same reason. Only with the greatest care as to the meaning of our words may we speak of an idea as a "symbol," or talk of "attributing our idea to reality," or even of "identifying" them or "affirming" the one of the other. In a judgment, for instance, not only is the subject always reality but the predicate is reality too, and the only idea in the case is the judgment itself, the act of apprehending the real.

II. "Knowledge *consists* in presentation." This emphasises the warning of the last paragraph. All we do is to see; judgment is not "the reaction of the mind upon presented contents" in any sense more mysterious than that in which seeing is the reaction of the eye upon the field of sight. It is true that every mental process has its inner side of activity as well as its outside of objectivity; a dead eye cannot see, and without being active I can know nothing. But the activity clothes itself only in the presented contents, and in further streams of these. Nowhere does the most elaborate investigation become anything else than this. Theories and suggestions are made, for instance, but made only in the presentation-field. I do not shape hypotheses behind my back and then bring them out to try on;—I find them in the pattern of what is before me,—literally "invent" them.

III. A small word in the text deserves notice here. Things are presented *in* consciousness. We get too many odd notions of faculties and substances if we speak without due care of an object "of" apprehension or of judgment, or of a thing as presented "to" sense or "to" thought. It is really presented "in" sense and thought, and is an object, not to my consciousness, but to me.[1]

IV. "Reality is presented in consciousness." Not in sense only or in thought only, but in all the presentation-fields we have; the real appears in sense, in memory, in expectation, imagery, imagination, intuition, and any other sort of presentation that may be found. Every one of these

[1] Dr. Stout (*Analytic Psychology*, i., p. 47) seems to deny this. "When we say that it (an object) is presented, it is better to say that it is presented *to* consciousness, than that it is presented *in* consciousness." This statement, however, is made in opposition to the subjective idealism which describes the object as a mere experience of the percipient's, and I do not think that Dr. Stout would have reason to object to my own use of 'in'. My account would conform perfectly to the first part of his sentence. "We may say, if we choose, that the object itself is *presented*, but we must not say that it is a presentation." His use of "presentation" is rather different from mine, but the statement is true for both meanings.

departments gives the thing room for special manifestations of its nature. Just as the phrase "idea of" an object is a general name for the happenings in thought-presentation which occur when the laws of the object's nature work there, so "the remembrance" of it and "the sensation" of it are names for its appearance in memory-presentation and sense-presentation. All the fields are so closely connected that when an object appears in sense, for instance, it is almost certain to appear elsewhere at once,—in sense-imagery of other kinds, in thought, memory, or expectation. The touch of a friendly cat in a dark room is likely to call up the visual image of it and a good deal of knowledge about it. So strong is the tendency to expand a presentation in this way that when our ignorance prevents the expansion our discomfort may be extreme.

In phrases which may mislead, but which if they do not mislead are excellent, such expansion has been called "interpretation," and the matter presented in the higher fields has been said to be the "meaning" of what is presented in the lower. The furry touch has acquired meaning when we have learnt to expand the presentment over all the fields which are necessary to give us an adequate view of "the cat". We are usually a good deal more interested in the higher extensions than in the simple object with which we began, and in this rather peculiar but interesting meaning of the phrase the sensation may be said to "stand for" or "symbolise" what follows; to be interesting in a "representative" capacity. Acquirement of meaning means increase of possibilities. The law of the thing's nature comes to act more freely and richly; the experience becomes developable, can be rolled out into many others. A small initial presentation comes to stand for more in the sense of deepening its aspect of promise; we see in it the beginnings of much potential experience.[1]

The word "symbol," however, is always a little dangerous, and it is especially dangerous in the case of downward expansion. Not only does a sensation spread upwards, but

[1] Dr. Stout's "anoetic consciousness" is, I suggest, just presentation without this tendency to expand. It is still presentation, and therefore I should not care to say that "in regard to it the antithesis of subject and object would be meaningless" (*Analytic Psychology*, i., p. 51). The object, showing itself in the presentation-field, is there, but it has little universality; it is the particular grey of the moment, with no expansion into "greyness" or into "cat". The subjective idealist, however, has no more standing-ground here than elsewhere. The grey is not in the least an experience of mine; simply because it is not the event of its own presentation.

anything presented initially in thought will generally ripple downwards as far as it can go. A cat which we think of cannot usually present itself in sense-perception (though something very like this is apt to happen in dreams), but it presents itself readily in sense-imagery, visual or verbal. Then we are apt to lose ourselves in all sorts of mazes if we begin to speak of this lower presentation, the image, as a symbol of the higher presentation, the idea. For we are led thus to look on the whole appearance as primarily sensuous, naming it an image symbolic, an image with a meaning; and then we naturally consider that the symbol serves instead of what is symbolised, and so come to deny or ignore the existence of the primary higher presentation; and by this time the path from psychology to the theory of knowledge is lost amongst chasms unfathomable.

V. Turning to the theory of knowledge itself, we find that philosophers seem subject to a constant temptation to depreciate some one presentation-field in respect of its power of exhibiting reality. Sometimes it is sense that is thus disparaged; the real, it is said, can be found only in the higher fields of thought, not in the mere succession of sensible experiences. It is true, of course, that thought has a great advantage, yet in the merest sensation we still meet with reality,—for what else is there to meet with? The *esse* of the sensation-event is only its happening; so is the *esse* of any presentation-event, thinking for instance. But the *esse* of what appears or is presented in sense is as independent and objective as that of what appears or is presented in thought. The commoner error, however, seems to be to disparage not sense in comparison with thought but thought in comparison with sense. Only in the sensation or sense-perception of the present moment, it is said or implied, are we in contact with reality; the rest is indirect knowledge, a construction, a shadow, an idea. We must maintain in opposition to this that the contact is just as close, just as immediate, in every field; that the past, for instance, is as really and directly presented to us as the present is; that the eye of thought sees as straight as the bodily eye, and that no veil or delusive mirror comes between it and the real universe.

VI. This may be made somewhat clearer, perhaps, by a closer examination of the nature of that universe. We are hindered in every part of philosophy by the tendency of human laziness to think in the lowest category available instead of the highest, and we often find that a difficulty is removed if we brace ourselves to push our categories one

step up. In epistemology in particular, a very large number of traditional problems disappear when for our habit of thinking of reality as substance we substitute a habit of thinking of it as law. A real thing, whatever else it may be, is at any rate a set of happenings in experience, and it is the way of these happenings and the necessity of it. Let us take its nature, then, to be this complex knot of laws working out in experience, just as the number 5 is a knot of those laws which we call number-relations. Every appearance of the thing, every happening that concerns it, will be a group of events conforming to some of these laws. When I say that the object appears in my presentation-continuum, I mean that the laws which make its nature are working themselves out in this. "I see Birmingham" means that the nature of Birmingham is determining some of the visual sensations which I now experience. The contemplation of a thing in memory, in imagination, or in the most elaborate thought means exactly the same kind of fact;—that the laws which are the nature of the thing are determining certain parts of my field of presentation.

Now this substitution of law for substance should, I think, make it easier to see the truth of our thesis that all kinds of knowledge are equally immediate. The category of substance tends fatally to carry with it some association of restricted position in space or time or something analogous to these. A substance, we feel, cannot be here if it is somewhere else; it cannot be now if it was once and has ceased to be. Therefore if we cognise such a thing we are cognising what is outside our mind, what is away and separated from us; therefore our knowledge of it is roundabout, not immediate; we cannot really be seeing the thing; what is here is not that thing but something else. But under the category of law an object is present wherever the laws of its nature rule, and that is the only meaning which presence has. These laws are not restricted in the least to governing sense; they can work in any kind of presentation-field. Hence it is literally true to say that the past or the future or the non-existent can be "present with me," or that the friend I think of has "entered into my thought," or has been "much in my mind". I can no more think of a thing which is outside thought than I can obey a law which is not obeyed, or see a thing which is out of sight. What is presented to us in any field is quite truly and literally in our presence, and what is only presented in thought may be "nearer than hands and feet".

VII. For completeness, we must end by looking at the negative side of our text. If all knowledge is presentation,

then what is not presentation is not knowledge. With this we enter upon thorny regions indeed.

1. In the first problem raised our substitution of the category of law for that of substance will help us again. Many philosophers have been inclined to deny that presentation is of the essence of knowledge, through thinking of a kind of perfect knowledge in which the object would cease to be presented to you because it had become you and you would cease to look upon it because you were being it. We must maintain that this is a mistake, and yet with the lower category a natural mistake. For when reality is looked on as a substance, odd associations of physical grasp and resistance and strain seem to enter into one's thoughts about knowledge. One pictures the subject and object as somehow interlocking and pulling each other together; the tighter and closer they can get the better the knowledge will be. So for perfect knowledge, one thinks, they would have to break in and coalesce and interpenetrate and become one. Now this seems to be a mistake, for under the category of law the whole tendency vanishes. When we cognise an object it appears in our field of presentation, inasmuch as its laws determine the features there. The better we know it, the more elaborately and freely and variously do these laws exhibit themselves; their field of show becomes wider and more delicately detailed; its shading is more differentiated and gets a larger range of tint. But there is not the least tendency for the continuum to come any nearer. As the mists clear away, the landscape only becomes more and more something which is not the spectator. In the determination of the concrete experience, *its* laws stand out more and more distinct from the laws of his vision.

This may be seen in a special way where the object to be known is the experience or the personality of an individual,—another self or one's own. A nature taken as law is capable of an indefinite amount of complexity and doubling on itself. To have a thing presented in thought is not the same as to have the-presenting-of-that-thing presented in thought, for here a new clause of the law comes in. The knowledge is just and "immediate" and real, but one stage less "direct," in the sense that the law has an additional twist in it;—the light is the same, but reaches us after polarisation. Similarly, and more evidently, an event of feeling or will is not the same as the apprehension of that event. Hence to know anything thoroughly, say a friend or a friend's life, is definitely not the same as to repeat or be that life. No doubt it would often be useful to repeat it *in order* to know; it is hard to find out

a man's inmost thoughts unless you can be the man for a while. But this repetition would no more be the knowledge than the performance of an experiment is the watching of that experiment. The knower has not intrinsically the slightest tendency to become the thing he knows.

2. Certain other claims for the existence of a knowledge not presentational in the ordinary sense have been put forward by psychologists rather than logicians, but logicians have been so eager to accept the claims that it is in every way philosophically important to clear up or to clear away the evidence for them. Perhaps the most important, and the least often explicitly questioned, has been the assertion of an awareness, or (cognitive) "feeling," accompanying all mental process. One of the most careful accounts of such knowledge is found, if I have not misunderstood him, in Brentano's explanation of inner awareness (*Wahrnehmung*). Inner observation (*Beobachtung*) he rejects; "es ist ein . . . psychologisches Gesetz, dass wir niemals dem Gegenstande der innern Wahrnehmung unsere Aufmerksamkeit zuzuwenden vermögen;" [1] there can be no introspection in this sense except of what we remember. Yet, he insists, it is contrary to common sense to deny that we are *aware* of every psychical process. This awareness will of course be itself a process, and in order to avoid an infinite regress Brentano maintains that this secondary process is simply a special aspect of the original one. "Die Vorstellung des Tones und die Vorstellung von der Vorstellung des Tones bilden nicht mehr als ein einziges psychisches Phänomen. . . . In demselben psychischen Phänomen, in welchem der Ton vorgestellt wird, erfassen wir zugleich das psychische Phänomen selbst, und zwar nach seiner doppelten Eigenthümlichkeit, insofern es als Inhalt den Ton in sich hat, und insofern es zugleich sich selbst als Inhalt gegenwärtig ist. Wir können den Ton das primäre, das Hören selbst das secundäre Object des Hörens nennen." [2] This oneness holds not only of the "Vorstellung," but of the part of awareness which Brentano distinguishes from this, *viz.*, recognition, assent, or belief. This also accompanies every psychical process, in the degree of complete conviction. When feeling is added, we get as complex an occurrence as any one ever insisted on calling "one". "Der einfachste Act, in welchem wir hören, z. B. hat als primäres Object den Ton, als secundäres Object aber sich selbst, das psychische Phänomen, in welchem der Ton gehört wird. Von

[1] *Psychologie*, Bd. i., p. 36 (references to edition of 1874).
[2] *Op. cit.*, p. 167.

diesem zweiten Gegenstandė ist er in dreifacher Weise ein Bewusstsein. Er stellt ihn vor, er erkennt und fühlt ihn. Und somit hat jeder, auch der einfachste psychische Act eine vierfache Seite, von welcher er betrachtet werden kann."[1]

Now some such intricacy as this must arise for any one who feels obliged to assume that we necessarily know our own mental processes. It looks a natural assumption, and yet it leads us into the strangest mazes, and also it is certainly inconsistent with the description of knowledge with which we began. Any mental process involves an object, but, as Brentano says, the process cannot (probably) be itself an object at the same time. Are we bound nevertheless to say that it is somehow known? I believe not. The burden of proof seems to lie with those who uphold such knowledge, and I believe the proof is lacking, or rests only on ambiguity of words. Take a case of sight, for instance. "Do we not," it may be asked, "at every moment *know what we are seeing?*" Yes, "what we are seeing," the thing that we are seeing, is just what we do know. We know it, moreover, in its aspect as an object of sight; we know its visible qualities. This piece of knowing is the process that is now going on in consciousness. I am conscious "in" it, not "of" it. The event of apprehension is not itself apprehended; we do not, in the ordinary sense of the word, know the knowing. And I see no reason for asserting that we know it in an extraordinary sense. It seems probably true that we can know it in the ordinary sense whenever we choose; the event of presentation can quite well be presented itself the moment after it has occurred. But there I stop short again, and deny that this new process further involves our knowing the knowing of the knowing. I incline to think that assumptions such as Brentano's are partly maintained by an ambiguity in the phrase "conscious process". When this name is applied to a *bodily* event it implies that the event is known, that we are "conscious of" it; it is presented in sensations motor or visual. But when it is applied to a mental event "conscious" seems to be the mere equivalent of "mental," and nothing of this sort is implied. "Process of consciousness" and "process presented in consciousness" are strictly incompatible terms; they cannot be applied to the same thing at the same time; nevertheless we are in the habit of using "conscious process" indifferently as the equivalent of either.

3. Finally, from the same statement, that what is not pre-

[1] *Op. cit.*, p. 202.

sentation is not knowledge, it will follow of course that pleasure-pain and desire and impulse and will are not ways of knowing. (In this use it is metaphysicians rather than psychologists who have claimed that they are.) An event of feeling may perhaps form the content of a presentation, as any other event perhaps may do, but it is not itself an event of presentation. Feeling and will add nothing to our knowledge, except in the sense that they form fresh material which may be known. The laws of an object's nature do work in feeling and will,—it is no doubt a statement about an object to say that it is desired; and similarly the laws of its nature work in its chemical and material action; nevertheless all these workings are *manifestations* of the nature only when they are manifested; *i.e.*, when they are made into the content of a presentation. The writer fully believes that feeling is simply the consciousness accompanying the working of a disposition, and varying as the working is hindered or successful. But how far it is from being consciousness *of* that working, knowledge of it, is shown by the way in which we can be ignorant of the grounds of our happiness or unhappiness. The dispute is not simply a matter of words, though it sometimes looks like one. Of course if one chooses arbitrarily to cling to the definition of knowledge as presentation, then feeling and "immediate awareness" are by force of words not knowledge. But I believe, beyond this, that there is nothing of the nature of knowledge there, no mysterious process which deserves to have the definition extended to cover it. The burden of proof is on those who hold that there is.

VIII. To sum up: There can be no knowledge, even the highest, without presentation, and presentation is all that is necessary. There are many parts of the field, but in every one what is presented is the real. Perhaps this is the most important moral of all. We have no need to attach special importance to the immediacy of the moment's sense-perception, for reality lies immediately before us whichever way we look. If we only see it "through a hole,"[1] at all events the hole is nothing worse than the pupil of our eye.

[1] Bradley, *Principles of Logic*, p. 70.

VI.—DISCUSSIONS.

LOGIC OR PSYCHOLOGY?

In all the philosophic schools there seems at present to be growing up a laudable tendency to protest against the abstractions which have hitherto been accepted as final for the sciences of Logic and Psychology, and to insist that the concrete nature of the actual processes of cognition shall somewhere be recognised somehow, and Mr. Joachim's interesting paper on Psychical Process in N.S., No. 69, is welcome evidence that this tendency has taken firm root also in the Anglo-Hegelian School. Mr. Joachim's paper is distinguished by the subtlety, candour and unwearying perseverance which his readers have long learnt to expect from his work. And even when the positive results seem hardly commensurate with the labour bestowed on them, his researches are well calculated to provoke discussion and to lift it out of the fog in which ordinary thought lives and has its being into the purer air where all parties can see what they and the others are driving at.

In this manner Mr. Joachim appears to me to have proved at any rate that the study of knowing cannot be partitioned out between the sciences of Logic and Psychology in such a way that one part of knowing, *viz.* the process of apprehending, falls to the one, and the other, *viz.* the object apprehended, to the other. I cordially agree that the whole study is *one*, whether it be called Logic or Psychology. This latter question Mr. Joachim regards as mainly a question of names. I agree to the extent of thinking that there are certain problems about knowing which have to be discussed by philosophers, whether they choose to do so in Logic, in Psychology, in Metaphysics, or in Ethics. But it hardly seems a matter of indifference which of those places they choose. Nor again is it indifferent whether or not Logic is distinguished from Psychology. For if Logic is not distinguished from Psychology, neither can Ethics be nor Æsthetics. The normative sciences must all sink to the descriptive and naturalistic level together, and lose the last shreds of the authoritativeness with which tradition has credited them; whereby in principle each man is anarchically left to do what seems good in his own eyes with the Right, the Beautiful and the True. In all these cases, therefore, it seems better to assign the descriptive function to the propædeutic science of Psychology; its domain will still be large enough to satisfy the utmost ambitions of a science.

Now the science Mr. Joachim is in doubt whether to call

Psychology or Logic is undoubtedly descriptive. It "studies the developing and developed meaning which is significant thought" (p. 80); it does not attempt to control it or to prescribe to it. Nor does the fact that its descriptions are often woefully incomplete, render it less psychological, though it may impair the value of its psychologising.

That it should appear to be something more august is therefore an illusion. It is probably due to the facts that the ordinary logician (and possibly Mr. Joachim himself) does not seem to have completely analysed the abstractions which his science has been wont to take for granted. For example, he does not appear to have ever inquired (I.) how the 'common' 'objective' meaning logic assumes is arrived at, or how the normal and 'sane' intelligence is recognised. Nor again (II.) has he considered why the notion of an individual psychical process has been introduced and found a useful (or necessary) abstraction. And lastly (III.) he does not yet seem to have grasped the scientific problem in its full concreteness, though it must gladly be acknowledged that Mr. Joachim at least is far more critical of abstractions than has been the custom in his school.

I. The first two of these abstractions are plainly correlative. They map out the spheres commonly assigned to Logic and to Psychology. And they are probably responsible for the fact that neither as logic nor as psychology will the current account of knowing work. Both, therefore, must be inquired into. If a thinker will really and honestly inquire how he assures himself that he is in possession of an 'objective' meaning, instead of making the vulgar assumption that of course such meanings may be had for the asking (or begging), he cannot fail to find that all the common conceptions of Logic are profoundly transfigured for him. He will find that to begin with he has only his own meaning, supported it may be by strong feelings of its 'truth' and 'necessity'. But all this is obviously so far nothing but a condition of his mind. To get an 'objective' meaning, therefore, he must pass from *his* meaning to *the* meaning, and from *the* meaning to *the others'* meaning, in order that he may know whether they too understand *the* meaning. Moreover the road between these three has constantly to be kept in repair, if his meaning is to remain 'objective'. For clearly if his meaning is not shared by others, it is not intelligible and 'common'; it becomes a 'subjective' peculiarity of his own. A conscientious logician, therefore, should for ever be asking himself—'Am I making my meaning properly understood, and communicating it to others?' A hasty and reckless logician on the other hand will neglect this duty. He will argue—'Oh, of course my meaning is the true meaning, which no one can fail to understand and accept. I have got hold of the objective truth, and it must be common to all sane minds. Why do I feel so sure of this? It is

not that I am dogmatic or conceited, but that I feel the universal reason speaking in me. The universal reason, which is one in all rational animals, is my sufficient guarantee for thinking that any one who is not an idiot must take my meaning.'

The temerity of this position may possibly be brought home to him, by asking how he knows that all sane minds think as he does, how he knows that his convictions are inspired by universal reason, how he knows that those of others are equally secured, what he means by 'common,' and how he discovers that two minds possess a truth in common. Some of his answers to these questions are plainly such as ought to rest on prolonged and scientific experiment, and this evidence he ought to be required to produce. Others seem hardly relevant: for example the appeal to universal reason on the face of it merely complicates the problem; for it imposes on him the duty not merely of explaining how two minds communicate with each other, but also of establishing his universal mind and showing how each mind is related to it. Howsoever he approaches this problem, it will be found sooner or later that the conception of a truth common to two minds involves all the metaphysical puzzles which distracted Plato in the *Parmenides*.

The airy reference to all sane minds, again, involves enormous difficulties in deciding what minds are sane. And this question cannot be scientifically settled without deciding what are the criteria of sanity and insanity. But this is a highly technical subject. Thus Logic seems unwittingly to make a mad doctor the ultimate criterion of truth. All philosophy is ultimately submitted to the arbitrament of the psychiatrist, who alone can be supposed to discriminate with authority between sanity and insanity. But this procedure is not only a paradox; it might easily prove a danger. For the psychiatrist, once installed in power, might quite well come to the decision that *no* philosophic minds were truly sane, on the ground that they differed too much both in their aims and in their methods from one another and from those of ordinary men.

Without however entangling Logic in endless difficulties of this sort, let us insist merely on asking the logician a simple question he cannot honestly shirk. *When he asserts what seems to him a truth, does he take any steps to ascertain whether or not it is 'objective' and whether other men (all or any) agree with him?* If he does, what are they, and what is their logical value? If he does not, why should not his claim be treated as a random one?

Until assurance on this point is reached, Logic surely has no case. It has yet to be proved that 'objective' meanings exist, and that a science of them is possible. Logic has no *locus standi* and cannot advance a single step. This inquiry, therefore, becomes a logical presupposition of the possibility of Logic itself as a science which concerns itself with objective truth. For clearly if objective truth does not exist or cannot be known, Logic becomes a pseudo-science; while if it exists, the study of the manner of its existence

may be of vital importance to Logic. How this study is to be carried on without a detailed examination of individual minds other than that of the logician, or how it can help being psychological, passes, I confess, my comprehension; but this does not render it any the less the previous question which must be moved to every enterprise of Logic.

II. Some consolation, possibly, may be derived from the reflection that if this inquiry were undertaken, it might throw much light also on the current notion of psychical process which so puzzles Mr. Joachim. For it seems to be the psychological complement of the logical abstraction of a 'common' meaning which two minds apprehend, each in its 'subjective' way. If, therefore, the epistemologist consented to compare two minds together, he might find the solution of both his puzzles. He might find *e.g.* that no two minds ever worked in quite the same way, nay that the differences were so persistent and extensive that it was only by a convention that the 'common' meaning could be established. In order to reach the notion of the 'objective' at all, it might be necessary to provide simultaneously for its 'subjective' distortion in every individual mind. And then the mystery why the integral process of cognition should have been dissevered into a 'common' object on the one hand, and an unknowable and logically worthless 'psychic process' on the other, would be solved. The object would have been compounded by assigning to the 'object' whatever parts of the total experience the knowers could agree upon, while the 'psychic process' would denote the residuum in each, left 'subjective,' as being that part on which agreement was impossible. Thus the explanation and the justification of the correlative abstractions held to underlie the sciences of Logic and Psychology would be that they facilitate our doing what we so greatly desire to do, *viz.* arriving expeditiously at objectivity without being impeded by subjective differences. 'Psychic process' would mean a rough and ready way of getting rid of these differences in the supposed interests of Logic. And the nature of this procedure would be revealed by abandoning the unduly individualistic (not to say solipsistic) character of the procedure by which the logician has hitherto ascertained that *his* truth was universal. But the question would remain whether even so the social character of truth had received sufficiently thorough recognition, and whether a really adequate interpretation would not have to start its reconstruction from the concrete judgments of personal thinkers.

III. The logician's unwillingness to face the concrete facts, to study the thinking of actual minds instead of dogmatising about a mere figment of his own, *the* mind in the abstract, proceeds probably from his inveterate contempt of the 'particular'. He has not yet disabused himself of the notion that general principles are far more precious than the particular cases to which they apply. He insists on believing that the former have intrinsic value *per se*,

and not as means of predicting the latter, while the latter as such cannot be known, and would not be worth knowing if they could be. And he holds that the scientific use of 'law' exemplifies his thesis. Hence the problem of Science is still represented as being a question of the eliciting, by hook or by crook, of general formulas which forthwith attain eternal exemption from any further correction or function or use or dependence on the particulars which exemplify them. In dealing with particulars it is henceforth assumed that the 'law' is known. The particulars must conform to it under penalty of being dismissed as unintelligible. Consequently the concern of Science with the individual case is discounted as a mere pretence. Science is not really interested in 'this piece of iron' as such. The particular as such is not intelligible, nor of scientific value. This iron is only something which behaves in such and such a way in order to illustrate a 'law'. If it does not, and in any way departs from the law prescribed for it, why then it simply is not 'iron,' and drops out of the purview of the scientific law. Similarly a mind which does not function as the logician wants is simply not 'sane,' *i.e.*, not a mind at all.

I venture to object that not only does this theory grotesquely misrepresent the actual procedure of Science, but that so long as it is upheld scepticism is ultimately inevitable and we can never vindicate the processes of human thought. (1) The logician's theory of Science misrepresents the nature of scientific 'law'. The law is not an absolutely certain, fixed and unbending truth which no further experience can modify. It always remains dependent on the 'facts' which exemplify its working. If these belie our expectations, the law is altered or abandoned. Consequently (2) the particular case is never negligible. It always contributes, however slightly, to confirm or to modify its 'law'. Science never relinquishes the right of learning from experience; it never enslaves itself to its expectations to the extent of taking any '*a priori*' as absolutely authoritative, come what may.[1]

Hence the 'thisness' of the iron is never insignificant. It is never true that "We observe just so much as is required for the formulation of the law" (p. 75). If so, we should never observe enough to correct the law. We must observe also whether under the particular conditions of the case our 'iron' does not develop new and instructive modes of behaviour and modify our conception of 'iron'.

[1] This is true even of the mathematical sciences. For (1) these sciences rest on postulates which might be altered if this should prove convenient, so that 'space' might be conceived otherwise than in Euclidean geometry, and units otherwise than in common arithmetic. And (2) their *sphere of application* depends on the empirical behaviour of things, so that it might be expanded, restricted or abolished altogether. The first two possibilities would entail alterations in the meaning of these sciences, while the third would in the end probably be held to destroy it altogether. Lastly (3) in every progressive science the meaning of every part is changed by the growth of its context.

And so (3) Science never deludes itself with the idea that its laws and its predictions are absolute, and that the difference between the conditions of the new case and of the old can never defeat them. It recognises, not only that the 'laws' were drawn from the 'cases,' but also that they are *meant* to be applied to them, and to be tested by them, and that, therefore, there is always a risk in the application of any 'law'. The conception of 'iron' *e.g.* is nothing infallible and immutable. It is not sacrosanct, neither does it guarantee that anything we apply it to will behave as 'iron' should. What was taken to be 'iron' may behave so strangely that on the whole we prefer not to call it iron at all, or to hold that it has somehow been corrupted by something else. It is moreover to such open-mindedness that Science owes its most brilliant discoveries. Philosophers may condemn this as reprehensible laxity in the use of concepts, logicians may protest against suggestions that some 'nitrogen' may be 'argon,' that some 'uranium' may be 'radium,' that 'solutions' may be 'solid' and 'crystals' 'liquid'; but they have no right to deny that it has been by this plastic use of concepts that Science has progressed, where conceptual dialectics have merely wasted or whiled away the time.

The fallacy in the logician's account of scientific procedure becomes manifest wherever prediction is attempted about beings intelligent enough to adapt their behaviour to new circumstances. Who, for example, would consider it reasonable to argue that because fifty years ago such and such views were distinctive of a 'Liberal' or a 'Christian,' no one could be a 'Liberal' or a 'Christian' now without believing in *laissez faire* or the special creation of species? Or could it be argued (without derision) that if all so-called 'Liberals' had abandoned the opinions once 'implied' in the conception, the conception was thereby in no wise altered or impaired?

Science then does *not* despise the particular case. Its laws would not be laws if they did not apply to it. And if they apply, they may be modified. They are based on experiences, and would not serve as guides of expectation if experiences did not confirm them. They are not therefore more real than the 'facts' they so conveniently group together.

If therefore we admit that Hegelian logic constitutes a distinct advance on Platonic, in that it make its 'concrete universal' live *in* the 'cases' instead of hovering above them and magically inspiring them, it must be in order to exhort it earnestly to be true to its own principle, and to make its 'universal' really concrete by conceding that nothing whatever about the 'particular case' can really be 'contingent' and logically meaningless. At present the 'concrete universal' merely suggests the question—*How can a universal be concrete which can never be applied?* It is merely used as a bugbear for a more conservative logic; no attempt is made to use it in the working of science. Scientifically, therefore, it is a farce; for it never proves applicable to any actual scientific problem. No

problem in its integrity can ever be exhaustively stated in terms of universals. Hence the universal is never really concrete; it always leaves out something which it has to disparage as 'mere particularity'.

What is true of Science must hold of Logic, if Logic is to be a science. Hence its 'laws' also cannot be supernatural and indefeasible revelations. To ascertain them it must study the individual minds which generate them. To be true they must apply to the procedures of individual minds, which cannot be dismissed as tainted with 'contingency' unreality, irrationality. No thinker has a right thus to discredit the instrument of his own thinking. All this may (and indeed should) appear *truistic;* but unless it is constantly borne in mind we shall never get an adequate and concrete Logic which will abstain from begging all the most interesting questions it can raise. Mr. Joachim therefore should supplement his study of psychic process *as it is not*, but as the logician would have it believed to be, by a consideration of psychic process *as it authentically is*, but as he has unfortunately declined to describe it (p. 67).

F. C. S. SCHILLER.

HUMANISM AND THE ETHICS OF MARTINEAU.

I REGRET to find myself classed amongst the ever-increasing number of those who have misunderstood Humanism. My misunderstanding, if it exists, is not intentional; but I am not yet convinced that it does exist. Nor do I think that Dr. Schiller is justified in dismissing the line of argument adopted by me in MIND, N.S., 67, on the ground that (i.) I have overlooked important differences between Humanism and the Intuitionism of Martineau, and (ii.) that I have incautiously adopted some of the most indefensible of the misconstructions of Humanism which are still current.

I.

In the first place, the purpose of my paper in MIND, N.S., 67, was not to point out differences between Humanism and Intuitionism, but to indicate certain similarities between Humanism and the *Idio-psychological Ethics of Martineau*. Martineau is doubtless an Intuitionist *in a sense;* but his Intuitionism is very different from that of any one else, and it was with the distinctive rather than with the common features of his Intuitionism that I ventured to compare certain characteristics of Humanism. "It is of the essence of ethical Intuitionism," says Dr. Schiller, "both that the formal *claim* to value should be taken as assurance of validity and that no appeal to the *consequences* of acting on intuitions should be allowed to reflect upon and to determine their value."[1] Now Martineau did appeal to the *consequences* of acting on intuitions in what he expressly called the *Canon of Consequences*, and it would seem that he also allowed these consequences to reflect upon and to determine the *practical* value of the intuitions. He tells us, for instance, that his Moral Scale has reference only to the contents of inward character, and still needs "an ulterior process of rational comparison of consequences before the rules of fitting conduct can be determined".[2] It is by an intuitive judgment of conscience that the relative moral worth of *simple* or *primary* springs of action is determined; but in order to determine the value of a complex motive—and almost all motives in practical life are complex—the consequences of the actions to which that motive prompts must be taken into consideration. In other words, in order to determine the moral value of any complex spring of action and of the particular actions in which

[1] MIND, N.S., 69, p. 125.
[2] *Types of Ethical Theory*, ii., p. 235.

it is expressed, "the doctrine of motives must be referred to the canon of consequences".[1] Martineau, then, does treat his intuitions empirically, and does allow that in practice the consequences of a spring of action must be examined before it can be admitted as an infallible guide to moral worth. Whether this method of dealing with intuitions destroys 'the essence of ethical intuitionism' will depend upon whether Dr. Schiller's definition of the latter is correct; but if Martineau is still to be regarded as an Intuitionist, certainly Intuitionism does not exclude all appeal to the consequences of acting on intuitions.

This being so, I can see no reason for admitting that I have overlooked any important differences between Humanism and the alleged Intuitionism of Martineau. On the contrary it seems to me that the parallelism between the two is almost complete. Martineau affirms that no action or line of conduct has moral worth *per se;* but that its moral worth depends upon the springs of action by which it is prompted; and that in order to determine what these springs are we must have recourse to consequences; and hence infers that the sphere of action and the moral worth of a complex spring cannot be determined *a priori* and without taking into consideration empirical data. Similarly the Humanist affirms that no 'claim to truth' has validity *per se,* but that its validity depends upon the needs which it satisfies; and that in order to determine what these needs are we must have recourse to consequences; and hence infers that the sphere of application and the logical value of needs as a criterion of truth cannot be determined *a priori* and without reference to empirical data. Only on one point does the analogy break down, and that is precisely the point in regard to which I suggested that Humanism was incomplete. Martineau maintains that our primary springs of action have only a relative value, and that this value can be determined by an intuitive judgment of conscience. Hence he has given us a scale of the primary and of some of the less complex secondary springs of action. The Humanist, on the other hand, though acknowledging that the value of our needs as criteria of truth is not absolute but relative, tells us little or nothing about how we determine their respective values. And in this matter, I contend that, as it is upon the power of 'claims' to satisfy our needs that their validity depends, the doctrine of the Humanist is decidedly deficient. He ought to make the study of human needs his first consideration; he ought to analyse them and try to discover those which are primary and simple; and finally he ought to construct for us some scale setting forth the relative value of different needs and of the satisfactions to which they give rise.

In asserting that there is a remarkable similarity between Martineau's Ethical Theory and the humanistic doctrine of Truth, I do not wish to imply, of course, that the Humanist confuses truth

[1] *Types of Ethical Theory*, ii., p. 245.

with Morality, or Logic and Epistemology with Ethics. I am perfectly well aware that there is a fundamental distinction between logical and ethical values, the validity of which the Humanist fully recognises. We may express this distinction, perhaps, by saying that whereas in the Epistemology of Humanism it is consequences which determine logical values relative to human needs, in the Ethics of Martineau it is human springs of action that determine ethical values relative to consequences. This difference, however, does not seem to destroy the parallelism which I have endeavoured to establish between the two theories. For it is not due to the fact that the Humanist adopts an empirical attitude which is supposed to be wanting in Martineau; but to the essential difference which exists between the very nature of a claim to truth and a claim to moral worth. Actions and motives proceed from within, whereas claims to truth, even for the humanist, come from without. Hence while the efficient cause of truth in a claim is its consequences, the efficient cause of moral worth in an action is its spring. But inasmuch as consequences must be considered relative to needs, and springs of action relative to consequences, the parallelism between Humanism and Idio-psychological Ethics may still be maintained in spite of the fact that the logician and the moralist are forced to regard 'claims' from a different point of view.

II.

The charge that I have adopted some of the most indefensible of current misinterpretations of Humanism seems to be based upon two facts: that I have accused Humanism (1) of minimising the intellect and (2) of a tendency to Subjectivism. Dr. Schiller has not refuted those accusations: he has merely denied them. Consequently I have no arguments to which to reply; and am still justified, I take it, in holding that Subjectivism is the logical result of Humanism until this inference has been shown to be invalid. I should like, however, to ask Dr. Schiller two questions. First, if he does not intend to minimise the intellect, why does he reduce the intellect to the common denominator of a couple of habits only one of which is in any sense a strictly cognitive function (*viz.*, the power of analysis), the other being merely physiological (*viz.*, the power of inhibiting *pro tempore* reaction to a stimulus)?[1] And secondly, why do humanists and pragmatists tell us that our concepts are merely symbols, since a symbol is an arbitrary sign which has no meaning apart from a concept, and cannot of itself represent though it may stand substitute for objective realities? Symbolism when applied as a general principle to the product of intellectual activity seems to me to imply Subjectivism. Lastly, the Humanist asserts that all knowledge has a 'personal tinge' and is relative to our needs and our human points of view which to some extent 'mutilate'

[1] *Studies in Humanism*, p. 356.

even the perception of 'facts'. Hence I may put the following dilemma. Either the 'personal tinge' and the effects of our 'mutilations' can be distinguished from the rest of knowledge or they cannot. If they can, the 'personal tinge' and the effect of mutilation does not permeate all knowledge but leaves some of it intact. If they cannot, knowledge can have for us no really objective significance and meaning, for we cannot eliminate what is the product of our own subjective activities from what is due to the reaction of the object.

III.

In regard to the realist's criterion for deciding what claims to truth are *really real* and what are not, I cannot attempt to answer Dr. Schiller's question here, as I fear that I have already absorbed all the space which the kindness of our editor will be able to allow me. But I may remark that whereas the pragmatist starts with a kind of methodical doubt as to the validity even of *perceptual* claims to truth, the realist prefers to start from what an opponent might call a methodical credulity. What he perceives with his senses the realist takes to be *really real* unless he has good reason to suspect an illusion. He does so because it seems to him *obvious* that the primary function of sense-perception aided by intellectual abstraction is to get at reality. Moreover, if he admits also, as I do myself, that *nihil est in intellectu quod non fuerit prius in sensu*, the difficulty of showing that some, at any rate, of our concepts, judgments and inferences are objectively valid, is not particularly serious.

LESLIE J. WALKER.

THE COSMOLOGY OF PRODICUS.

Thanks to Plato's satirical genius Prodicus has long been associated in the minds of students with petty verbal distinctions rather than with broad physical theories. Even so recent a historian as Windelband still treats him merely as a superficial moralist and etymologist. Welcker indeed recognised the importance of the Sophist of Ceos three-quarters of a century ago; but his juster appreciation was long overborne in Germany by the authority of Zeller. Dümmler took up the subject again in his *Akademika* (1889); and his researches have received some attention from such historians as Gomperz and Döring, whose tone as regards the Sophists in general is quite opposed to the tradition represented by Zeller; but while admitting that Prodicus taught something about nature, they look on the question what it was that he taught as insoluble.

Nevertheless, I believe that this interesting point is, like the name of Hecuba's mother and what song the Sirens sang, not beyond the reach of all conjecture. That our Sophist had a cosmology of his own is rendered highly probable, if not absolutely certain, by a well-known reference in the *Birds* of Aristophanes where we are promised a new theory of creation which is to send Prodicus away howling (Προδίκῳ παῤ ἐμοῦ κλάειν εἴπητε τὸ λοιπόν, Bothe, 653). Now to have such an overwhelming effect it seems evident that the new explanation must be constructed on the same lines as that with which it is put in competition; for otherwise why should one speculation be singled out for defiance where so many disputed the field? And that other explanation must have been well known at Athens if an Athenian audience was to appreciate the force of the parody. Let us see then what Aristophanes has to say about the birth of the world. He describes it as first of all a process of spontaneous generation. In the beginning all was darkness and void, without earth, air or heaven. Night, dwelling in the infinite gulfs of Erebus, produces a wind-egg, whence "Love breaks forth flower-fashion, a bird with gold on his wings". Then from the union of Love with Chaos proceeds the whole race of birds. After these at the instigation of Love a universal pairing sets in, resulting in the birth of heaven, ocean, earth, and all the gods. Here the primordial nature of Love is borrowed or rather quoted from Hesiod's Theogony; the originality lies in the dignity attributed to birds as older even than the very elements and the gods themselves. They are further represented as conferring great benefits on mankind by foretelling the changes

of the seasons, and more generally by furnishing auguries of future events.

In this last part of the panegyric on birds Dümmler finds a direct reference to the argument reported in Xenophon's *Memorabilia* (bk. iv., chap. 3), which, however, he does not regard as a genuine utterance of Socrates; and of this argument he supposes Prodicus to have been the real author (*Akademika*, pp. 156 *sqq.*). But Dümmler's view seems to suffer from two fatal weaknesses. In the first place the notion that Xenophon can no more be relied on than Plato as an exponent of the genuine Socratic teaching has failed to hold its ground even in German criticism. And in the second place there is no reason for believing Prodicus to have been a teleologist, but rather the contrary. At least we know on the authority of Persæus, a pupil of Zeno the Stoic, that he looked on the gods as mortals deified and worshipped for such useful discoveries as bread and wine (*Doxographi*, p. 544); while the more doubtful authority of Epiphanius credits him with the view that the gods were personifications of the elements and of the sun and moon—an otherwise not improbable tradition (*ibid.*, p. 591). Besides it is, so to speak, as an evolutionist not as a describer of what is now going on that the comic poet enters into competition with the great Sophist.

I think we shall find a safer clue to what Aristophanes is talking about in certain fragments from the lost tragedies of Euripides. In some eloquent verses of unknown *provenance* Aphrodite (not Eros) is celebrated as a great cosmic power whence all living things together with their means of sustenance are derived (Fr. 839 in Wagner's ed.). Another passage from a chorus in the *Chrysippus* describes earth, the universal mother, as impregnated by rain from heaven, and giving birth to men and beasts. On their dissolution that which is of earth returns to earth, and that which is of heaven to heaven, for nothing really perishes, but is merely separated, and reverts to its proper form (Fr. 833). Finally, a third fragment (487), quoted from a play called *The Wise Melanippe*, describes heaven and earth as having originally formed a single body, on the break-up of which they reunite and give birth to trees, birds, beasts, fishes and men. Taken together these passages present a general view of creation fairly resembling that of Aristophanes. The principal points of difference are (1) that Eros takes the place of Aphrodite in the comic version, and (2) that birds come first instead of second or (possibly) third in the order of production. The two changes are closely connected, Eros being represented as "a bird with gold on his wings," for the greater glory of the feathered tribe. The fact, however, that Prodicus rather than Euripides should be named as the philosopher on whom the winged chorus is improving seems to show that the author of *Melanippe* was indebted to the Sophist for his heroine's remarkable lecture on the natural history of creation. And there seems to be something like a hint at such an obligation in Melanippe's admission that her

learning is derived from her mother, a daughter of that famous teacher the Centaur Cheiron. In this instance Cheiron may possibly symbolise no less a personage than Empedocles, from whom Euripides would have derived his cosmogony—as also would Aristophanes—through some loose and popular adaptation set forth in the lectures of Prodicus. The original union of all things in a single uniform body, assumed by Melanippe, is, in my opinion, much more obviously related to the Sphairos of "the great Sicilian" than to the primordial confusion of Anaxagoras with which it has been identified by some critics; while the Aphrodite of fragment 839 is still more obviously the uniting cosmic power of Empedocles, who indeed calls it over and over again by the name of the love-goddess. But what makes the dependence (direct or indirect) of Euripides on Empedocles nearly certain is the close agreement of the younger with the older poet in his enumeration of the classes called into existence by Love. In Melanippe's speech these, as I have said, are trees, birds, beasts, fishes, and men. In the poem *On Nature* they are trees, men and women, beasts, birds, fishes, and gods (Diels, 21, and again in the same order in 23). One may suppose that gods were omitted from the stage version out of deference to the feelings of an Athenian audience, who would perhaps have found this lumping-up of gods with beasts and fishes—what indeed it is—somewhat disrespectful. Moreover Empedocles, as a systematic thinker, feels himself under the necessity of providing a distinct set of inhabitants for each of his four elements. Earth leads off with three kinds, trees, human beings, and beasts, while air, water, and fire follow with one each, birds, fishes, and gods, thus giving a sort of balance and symmetry to the whole. Euripides, on the other hand, not being concerned with the four elements but only with the generations of heaven and earth, has no use either for fire or its denizens and simply copies out the remaining items without any sort of logical order in their enumeration.

I do not think that he copied directly from Empedocles, but rather from Prodicus, whom we must therefore suppose to have given a sort of popularised version of the Sicilian cosmogony in his lectures at Athens, whence Aristophanes and Euripides both drew for their respective purposes. That Prodicus followed Empedocles is made otherwise very probable by his theory of religious origins already referred to. If we could accept the report of Epiphanius that he regarded the gods as personified elements there could be no doubt about the matter, for that is just what the Acragantine philosopher does. And, even apart from such evidence, his rationalistic identification of Demeter and Dionysus with bread and wine was probably suggested by the ascription of divine names to the four elements in the poem *On Nature*.

Aristophanes gives us an author without a theory, Euripides a theory without an author. By fitting the two together I have tried to supply a missing link in the history of thought.

A. W. Benn.

"THE ROOTS OF REALITY."

A FEW words of reply to Mr. Barker's interesting Critical Notice of my book, *The Roots of Reality*.

The implied reproach (p. 131) that "the problem of the metaphysical ultimateness of time" ought to have been dealt with, I am myself inclined to accept, and hope to take an early opportunity of making good the *lacuna* in my argument which Mr. Barker seems to find owing to its omission.

Mr. Barker's criticism otherwise mainly resolves itself into (1) That the notion of the alogical, as put forward by me, combines "the two inconsistent parts of a presupposition outside experience and a factor within experience"; and (2) that "predicates or distinctions" applicable to the progressive but "ever incomplete Knowledge of Man" are "uncritically transferred to the consciousness which is all-embracing, and therefore raised above the level of all such distinctions" (pp. 132-3). Now here we have two quite definite issues raised, and I admit that the capacity of the main principles laid down in my book to sustain themselves against Mr. Barker's criticism is a serious if not crucial test of their philosophic validity. First as to the charge of "transcendency" (in the Kantian sense) as regards the Subject of all Consciousness. I do not regard this latter as "outside experience" in any other sense than that it is not any *part* of experience. It is also no object "within experience," and this for the simple reason that it is experience itself—the In-itselfness of experience if one will. I have repeatedly insisted that the primordial subject translated as mental notion—as for the matter of that all other alogical ultimates as mental notions—is a mere abstract symbol. But the *that* of which it is the symbol, which for Kant was (generally) a logical unity, but for me is an alogical ultimate, is in truth the very "stuff," in which all processes of consciousness "live and move and have their being," the warp out of which the woof of Reality is spun on the "sausenden Webstuhl der Zeit". Hence it is not "transcendent," seeing that it is no more "outside experience" than "within experience," neither *Kern noch Schale*, but the ultimate Matter of all perception, and therefore of the real world, as opposed to its Form, in the "manifold" of ordinary apprehension.

How then, asks Mr. Barker, can there be any question of priority? I answer only in so far as it is the most fundamental condition of experience. While concrete experiences presuppose the Ego, the Ego does not in the same way presuppose them. I need scarcely

say that "priority" is not used here with any time-reference, although a discussion of the time-problem would undoubtedly throw further light on this question of order in genetic value. My contention might however, I admit, be stated to the effect that in the correlation of subject and object, the subject as such, has a prior value in the sense that *if we were to translate* the transcendental process into terms of time and causation, we should be compelled to regard the subject as creating, by self-determination, the object, and not *vice versâ*.

Mr. Barker's second main contention is that I transfer "predicates and distinctions" proper to the "limited and progressive consciousness of man" to the "universal consciousness". In this my critic seems to me to fall back upon the old pallogistic conception of a static "wound-up" Absolute against which my book is a protest. He seems to set the Absolute as universal consciousness over against the consciousness of the particular personality. But is there any warrant for this severance? Does it help us in any way towards a solution of any problem? Is there any justification for the assumption of a universal consciousness that is actual in the sense in which our individual consciousness is actual here and now, and that, notwithstanding, has no particularity attaching to it—that is not individual? I fail myself to see that there is any. Such consciousness, it seems to me, must be treated, not as actual, but as a mere potentiality behind the individual consciousness, of which the latter is the particular and actual form; as an infinite possibility of (actual) consciousness, eternally realising itself in particular determinations and in more and more complex forms (personal consciousnesses) yet *per se* and apart from its self-realising momenta in time, inchoate (*cf.* Ferrier's "More than 0 and less than 1," or the "God" of Scotus Erigena and the mystics); in a word, from the standpoint of logic an insoluble enigma. As I pointed out in my book, if any one likes to postulate an eternal actual consciousness, "time apart," existing *per se* as universal mind, he has a perfect right to do so, but I contend that such a postulate is in no way involved in the self-consistency of our consciousness, and hence that philosophy as a system of exact thought, whose test is that its each stage is necessitated by such self-consistency, must occupy an agnostic position with regard to it. Of course philosophic theism insists upon this postulate. But, for myself, I repeat, I cannot see that it is other than an assumption foisted *ab extra* upon the conclusions of philosophic analysis.

The relation of the two sides of our Consciousness—the metaphysical, apprehending, "consciousness in general," the determination of the primordial subject, which *knows* the world and the individual mind alike, and the individual mind itself, which is identified by reflexion with this subject, in opposition to an object world not so identified—this is of course the great *crux* of Modern Idealism. That Object is nothing but the determination of Subject

is admitted, that it is only secondarily and psychologically the determination of the particularised, temporal and limited subject, myself, is also admitted, but what the meaning of the ultimate subject is *per se*, *i.e.*, apart from its focussing, its particular diremption, as this or any given psyche, is the sempiternal problem to which philosophy can indeed find the formulation but not the solution. Certainly the assumption of the Root of all Consciousness as in some sense a universalised *actual* consciousness, an assumption that Mr. Barker appears to make, is to me indistinguishable from that of the "static Absolute" which; as I understand him, he agrees with me in repudiating.

If we regard the primordial subject as involving *per se* an actual "universal Consciousness" we are in any case on the horns of a dilemma. Either it is particularised, and then we have only one more personality, with an immeasurably greater range of consciousness than ourselves, perhaps, but not universal; and in any case as much independent of my consciousness as mine is of my neighbour's—which leaves the problem where it was. Or, as I have just said, we have a "static absolute" that in the last resort is no more than a logical abstraction. The Absolute as Subject of consciousness we can surely know only as the *potentiality* of all consciousness including our own. If it have any other meaning than this, and if so, what that meaning is, remains hidden from us by the essential conditions of our finite knowledge. Its one significance for us as exact thinkers, must be, that it is the "permanent possibility," the *eternal principle* of all experience. The Ego as ultimate subject cannot therefore be correctly described as unknowable, since it is knowable (though certainly on the confines of knowledge) in this sense. The foregoing is however for us its only predicate. If we seek to define it further we become involved in plausible perhaps, but unverifiable ontological speculation, and leave the *terra firma* of *Erkentnisstheorie*. Analysis of the conditions of experience carries us to this point of contact with ontology, but no farther. It is the door to which exact thought finds no key; the veil past which reflexion cannot see.

Mr. Barker more than once refers to my principle of the "Alogical" as being 'unsatisfactory'. But surely the first consideration is whether the notion itself is justified by the analysis of the elements of conscious experience as given. If it is, the question of its satisfactoriness, by which I understand its utility as an instrument of thought in the working out of speculative and other questions, is a matter for after-consideration. As regards this latter point I thought I had furnished suggestions, over a fairly wide range of problems, tending to show that it was capable of a very wide, not to say universal, application—and not without fruitful results. I fail to see that Mr. Barker has refuted, or even dealt with, my arguments in this connexion.

E. BELFORT BAX.

VII.—CRITICAL NOTICES.

An Introduction to Social Psychology. By William McDougall, M.A., M.B., Late Fellow of St. John's College, Cambridge, Wilde Reader in Mental Philosophy in the University of Oxford. London, Methuen, 1908. Pp. 351.

The purpose of this very interesting book cannot be better described than in its concluding sentence, in which the author expresses the hope that enough has been said "to convince the reader that the life of societies is not merely the sum of the activities of individuals moved by enlightened self-interest, or by intelligent desire for pleasure and aversion from pain; and to show him that the springs of all the complex activities that make up the life of societies must be sought in the instincts and in the other primary tendencies that are common to all men and are deeply rooted in the remote ancestry of the race".

As regards the former or critical purpose of the book, there can be no doubt that the author is right in rejecting the view that human beings always act in accordance with the principle of self-interest—or indeed any other intellectual principle. The view, indeed, is moribund, if not dead. But, during the dominance of the Utilitarian school, it met with ready acceptance; it lies at the basis of the political doctrine elaborated by that school; and it may be traced in some of the political and economic maxims still commonly admitted. For this reason it was worth the author's while to take account of it, not so much for the purpose of refutation—for which the time is past—as for the sake of understanding. But his attitude to it is too exclusively negative. It is quite true, as he says, that the fundamental problem for the psychologist is not to explain men's occasional lapses from reasonable action, but rather the question, "How can we account for the fact that men so moved [by inherited impulses] ever come to act as they ought, or morally and reasonably?" But he treats the converse problem with unnecessary scorn. I do not think that Mr. McDougall would deny the existence of mental states in which consciousness of a principle regulative of conduct accompanies voluntary action in a direction opposed to the principle; nor am I sure that, formulating the matter thus, he would think the analysis of such a mental state wasted labour; and it was the analysis of a state of this kind that occupied the attention of the writers who—from Aristotle

to Sidgwick—have discussed "unreasonable action". Genetic psychology gives the principle of explanation in showing the gradual process by which impulses have been organised rationally in conduct, and the incompleteness with which this rationalisation has been effected; but the exact nature of the disharmony that exists has to be brought out by analysis; and this analysis is not correctly described as an attempt "to prove that 'unreasonable action' . . . is actually achieved occasionally" (p. 9).

The criticism of "intellectualism" occupies, however, a very small part of Mr. McDougall's volume, and may be regarded as simply a defence of the view that mind is fundamentally active. On its constructive side the doctrine of the book is based upon a theory of instinct and emotion which seems to me both original and important. A number of controversies attach inevitably to the exposition, concerning, for example, the definition of instinct, the extent of its influence in human life, the claim of certain processes to be regarded as instinctive, the distinction of primary from derivative emotions, and so on. I shall attempt to give an account of Mr. McDougall's own view, without unnecessary reference to these controversies.

Instinct is defined as "an inherited or innate psycho-physical disposition which determines its possessor to perceive, and to pay attention to, objects of a certain class, to experience an emotional excitement of a particular quality upon perceiving such an object, and to act in regard to it in a particular manner, or, at least, to experience an impulse to such action" (p. 29). This definition has one point in common with all other views of the subject, namely, that instinct is "inherited or innate". It differs from current views in not limiting instinct to the reactive impulse, but identifying it with a complete mental process which comprises perceptive, affective and conative factors. Instinct is referred to a "psycho-physical disposition"; and no objection need be raised to this term (now so common) if it be borne in mind that the term explains nothing, and is very much on the level of the term "faculty" once in favour with the descriptive psychologists. Perhaps it is meant to cover the characteristic, formerly implied by the term "faculty," that each instinct is "a relatively independent functional unit in the constitution of the mind" (p. 49).

According to the definition, emotion is simply a factor in instinct. Each principal instinct, it is said, conditions some one kind of emotional excitement whose quality is specific or peculiar to it. These emotions, each of which is the affective aspect of a principal instinct, are the "primary emotions" (p. 47). The primary emotions and simple instinctive impulses are distinguished from the derivative or complex by two tests: they are clearly displayed in the instinctive activities of the higher animals; and they appear occasionally with morbidly exaggerated intensity.

Mr. McDougall gives a list of seven principal instincts; but the

omission of hunger (*cf.* p. 29) from among them makes it doubtful whether the list can be taken as exhaustive (in spite of the statement on p. 88). The dependence of hunger upon a temporary but recurrent bodily condition does not exclude it from the scope of his definition. In each of the instincts we must, in accordance with the definition, distinguish the reactive or impulsive tendency, the emotion and the excitant. It is worth while to set these down in tabular form. Two explanations, however, should be made first. In the first place, the author commonly gives to the instinct the name of its reactive or impulsive factor, thus to some extent (I think) obscuring the doctrine already enforced by him that the emotion is not an accompaniment of the instinct, but one factor in it. In the second place, the excitant named in the table is that which the author seems to regard as the simplest and primary circumstance to which the activity of the instinct is due, and not necessarily its ordinary excitant in mature consciousness.

Impulse.	Primary Emotion.	Excitant or Afferent Inlet.
Flight (and subsequent concealment).	Fear.	Sudden loud noise; the unfamiliar as such.
Repulsion.	Disgust.	Bad tastes or smells; contact with slimy or slippery substances.
Curiosity.	Wonder.	The unfamiliar (a larger degree of which excites fear).
Pugnacity.	Anger.	Obstruction to any instinctive activity.
Self-assertion (or self-display).	Elation (positive self-feeling).	Presence of spectators to whom one feels oneself in any way superior.
Self-abasement (or subjection).	Subjection (negative self-feeling).	
Parental instinct (protective impulse).	Tender emotion.	A child's expression of distress.

In addition to these there are the reproductive, gregarious, acquisitive and constructive instincts, which, in spite of their great importance for social life, "play but a minor part in the genesis of the emotions" (p. 82).

This scheme involves a theory of emotion. Emotion is not a complete psychosis, but simply the affective aspect of an instinct. I could have wished that somewhat more detailed explanation had been given of this affective aspect. One thing, indeed, is clear from the author's exposition: emotion is not to be identified either with its motor expression or with pleasure-pain; "pleasure and pain are not in themselves springs of action, but at the most of undirected movements" (p. 43). Perhaps the emotion may be described as a kind of subjective excitement which tends to be accompanied by,

but is not identical with, pleasure-pain ; and this excitement is of several quite distinct kinds — fear, disgust, wonder, anger, etc. These must be regarded as ultimate facts of mind, just as much as, for example, the sensations, red, blue, yellow, are. They can't be explained to any one who has not experienced them. So far the theory of emotion agrees with that worked out by the late David Irons, in his *Psychology of Ethics* (1903). Its distinguishing characteristic consists in the assertion that each emotion depends on a special excitant and impulse which, together with it, make up a complete "psycho-physical disposition" called an instinct. The instincts appear fully organised in the human being ; but their biological utility suggests that their organisation in just this form was favoured by natural selection acting upon the pre-human ancestors of man. And to ask why anger should be of this quality and fear of that is a question as unanswerable as why red is red and blue blue.

Looking at the details of the above list, the first thing that strikes one is that sympathy, imitation, etc., are not classed as instincts, and that joy and sorrow are not among the emotions. This leads to some further account of Mr. McDougall's views.

Sympathy, Imitation and Suggestion (it is held) are not instincts, because in an instinct the excitement of the innate disposition "determines an affective state or emotion of a specific quality and a native impulse towards some specific end" (p. 90). The three tendencies named have not this characteristic. In Sympathy any one of a number of different emotions may be induced in the observer (or subject), and in each case the appropriate impulse is excited : there is no single type of emotion or of reaction peculiar to sympathy. There is the same variety, both emotional and active, in Imitation. Suggestion, also, is without the specific character which, in the author's view, marks the instinct. Along with these the Tendency to Play is described, and it also is classed as an innate general tendency or "pseudo-instinct". That instinctive tendencies are to be found in the operation of all these pseudo-instincts is admitted ; most of them he succeeds in identifying with the instincts already recognised. In one case, however (p. 106), he has to postulate an additional "extremely simple rudimentary instinct" to make his theory work. A still more difficult hypothesis is involved in his explanation of the play-tendency. After an interesting discussion of Groos's theory he comes to the conclusion that something more than preparation for mature life is involved in the playful fighting of young animals and in the games of boys. "The movements," he says, "with their characteristic differences from those of actual combat, must be regarded as instinctive, but as due to the excitement of some modified form of the combative instinct, an instinct differentiated from, and having an independent existence alongside, the original instinct" (p. 112). The impulse is to "get the better of," not to destroy, the opponent ; the emotion

involved is clearly not anger, but no positive account of it is given. The probability of such an instinct being developed in animals is defended on the ground of its educational value—"to secure practice in the movements of combat" (p. 114). The speculation is ingenious; but one would like to know whether there are any other instances of one instinct giving birth to another instinct to be its daughter and handmaid.

The instincts as they operate in the higher animals, but more particularly in man, are, of course, modified by experience. Four principal causes of modification are distinguished: (1) The innate disposition comes to be excited by other perceptions or ideas than its primary excitants; (2) its expression is modified and complicated; (3) instinctive processes blend; and (4) "the instinctive tendencies become more or less systematically organised about certain objects or ideas" (p. 32). By means of these processes, especially the last, the nature of the Complex Emotions and of the Sentiments is explained. In his analysis of these the author adopts and utilises the view of Sentiment as "an organised system of emotional tendencies centred about some object," which was first set forth by Mr. Shand in MIND (N.S., vol. v.). The succeeding chapters of the first section of the book contain a detailed analysis of the Sentiments and Complex Emotions. The second and concluding section consists of a series of chapters on the ways in which social life has been shaped by the operation of the primary instincts and other innate tendencies. All these chapters contain much interesting and important matter. Considerations of space, however, forbid any discussion of their detail; and I must content myself with a few remarks on one or two leading points in the general character of the doctrine set forth.

Mental dispositions are either innate or acquired. The innate consist of the instincts, which are tendencies to attend, to feel, and to react in specific ways, and of certain general tendencies to imitate the movements of another, to receive his ideas by suggestion, and to share his emotion by sympathetic induction. These latter (all included by M. Tarde under the term "imitation") are non-specific, that is, are indifferent to the special kind of mental content to which they lead. Along with them may be placed (not habits but) habit. These specific and non-specific tendencies form the inheritance of each individual mind. All else is acquired by individual experience working upon them. The consciousness of self, the complex emotions, moral and intellectual ideas are thus empirical products which need to be built up afresh for each man. But their social character is assured because the instincts on which they are based have been "selected" owing to their being serviceable to the race, and because the imitative tendency leads each man to fashion himself after a social pattern, while habit preserves the connexions of ideas and impulses once made. The all-sufficiency of instinct is asserted in the following passage:—

"Directly or indirectly the instincts are the prime movers of all human activity; by the conative or impulsive force of some instinct (or of some habit derived from an instinct), every train of thought, however cold and passionless it may seem, is borne along towards its end, and every bodily activity is initiated and sustained. The instinctive impulses determine the ends of all activities and supply the driving power by which all mental activities are sustained; and all the complex intellectual apparatus of the most highly developed mind is but a means towards these ends, is but the instrument by which these impulses seek their satisfactions, while pleasure and pain do but serve to guide them in their choice of the means" (p. 44).

This passage fairly represents the doctrine of the book. But I think it shows too great a rebound from the "intellectualism" which it opposes, and I am convinced that it goes a great deal farther than the facts justify us in going. It is admitted, of course, that the greatest perfection of instinct is exhibited by animals very low in the biological scale. When instinct is modified by the capacity for learning by experience and by intellectual processes a higher stage of development has been reached. This also is matter of agreement. But the assertion that, even in the highest life, instinct always determines the ends, and all that thought does is to modify or devise means towards these ends, is supported by no proof which I can discover. Indeed, the whole trend of the discussion brings out the profound modifications which human ends, as well as the means towards them, undergo through intellectual processes. Mr. McDougall, however, seems to me unduly to minimise the work of intellect, and to speak of it as a mere mechanical instrument, used by man but hardly of the essence of his life. I do not suggest that thought fashions ends of conduct *in vacuo*, or out of "bloodless categories"; but in the human mind the instinctive end becomes the object of reflexion, and suffers modification in the process.

Further, if I have correctly grasped the general position of the book and its implications, it would seem that not merely the moral consciousness, with its principle of valuation, but also the intellectual categories, such as causality or the axiom of non-contradiction, must, like other mental products, be developments from instinct. But this question is not discussed.

With regard to the moral consciousness, however, Mr. McDougall is explicit. His discussion is also valuable and suggestive, though too complicated to admit of easy summary. The chief points seem to be the following: The importance of tribal custom in moral development is admitted, but regarded as secondary; its judgments are "imitative," whereas the original moral judgments "proceed directly from emotions" (p. 216). There is, however, no specific moral emotion or moral sentiment. Nor is sympathy fundamental, although it, as well as the self-feelings, enter into the composition

of the various emotions from which judgments of approval or disapproval proceed. If we ask for the most important and primary source of morality we must go to the instincts. "All altruistic conduct has its root and origin in the maternal instinct" (p. 204). In particular, we must look to the intimate alliance that exists between tender emotion and anger: "the anger evoked in this way is the germ of all moral indignation, and on moral indignation justice and the greater part of public law are in the main founded" (p. 73). This is Dr. Westermarck's theory with an element of precision added to it; the moral indignation is due to anger excited in connexion with the tender emotion. That the obstruction of any instinct produces pugnacity or anger, we have already learned; but in this case the anger is produced not by an obstruction of the tender emotion, but by the cause which gives it an opportunity for exercise. Thus the instinct is modified in a very marked way. It is easy, no doubt, to invent explanations of this as well as the other difficulties connected with the hypothesis; but it is also hard to verify these explanations. I imagine that the advantage which the hypothesis has over Dr. Westermarck's less specialised view is that the connexion with tender emotion gives to the indignation excited a certain "moral" flavour. It must be remembered, however, that the altruism of the maternal instinct is of a very exclusive kind, and that no reason has been given for denying that the anger excited by a blow or a theft is also a "germ of moral indignation".

Moral indignation, however, is not put forward as the sole origin of morality. At the most it could account only for judgments of disapproval and not for judgments of approval. It is characteristic of Mr. McDougall's ingenious but candid analysis, that morality arises from a number of diverse sources (*cf.* p. 218) which may well lead, and do lead, to conflicting moral judgments, and that, in showing how an ideal of conduct may be acquired, his theory does not enable him to give a reason for holding one ideal to be better than another.

Criticism of this and of other points could hardly be made adequate within the limits of a review; and I must content myself with recommending the book both for its suggestiveness and for the ingenious way in which a few simple principles are made to yield a complete account of mental life.

W. R. SORLEY.

Anti-Pragmatisme, Examen des droits respectifs de l'aristocratie intellectuelle et de la démocratie sociale. Par ALBERT SCHINZ, Professeur à l'Université de Bryn Mawr. Paris, Alcan, 1909. Pp. 309..

M. SCHINZ'S book is a document of great interest as a genuine piece of psychological self-revelation, a spontaneous reaction of a philosophic soul upon a new idea, too new and too big to be em-

braced by it, but not too alien to stir it to its depths. Such souls, moreover, are just now quite common, and M. Schinz has doubtless blurted out the secret thought of not a few philosophers. Anti-pragmatism is just now the very word for the strongest of their feelings; anti-pragmatism is the live issue of their thought; if they could see a way to *écraser l'Infâme*, they would welcome anything. Of this temper among intellectualists we have, however, had many indications, inferior to M. Schinz's only in point of frankness and energy of expression: what is distinctive of his work is that it is plainly written from the standpoint of a continental positivist or naturalist, who cannot help thinking all things in terms of the antithesis between science and religion, but does not yet clearly apprehend the motives that actuate Anglo-American thinking. It is distinguished also by a decorum of controversial manners which has been lacking to English philosophy ever since associationism went under thirty years ago in a storm of obloquy. Yet M. Schinz too is full of righteous indignation; it only incites him, however, to write well and vividly. How then will Pragmatism look when seen through the medium of such a temperament?

Pragmatism, M. Schinz declares, is but a new term for opportunism in philosophy. It is evil, because it introduces into our way of thinking a degrading spirit of sophistic, because it is a popular philosophy which appeals from the aristocracy of intellect to modern democracy, because it attempts to force impersonal philosophy, non-moral science, and indifferent nature to speak the language of our passions and our aspirations, because it denies that the conflict between intellectual and moral truth is irreconcilable. It rests on the fact that where science stops we have to live on beliefs; but this merely proves that it begins where true philosophy has ended. It is the philosophy of common sense in the most vulgar sense. It trips up logic, and is the least philosophic of all the philosophies ever propounded. It ought to have been strangled in its cradle. True it is, philosophies always have to a certain extent adapted themselves to the needs of men, and so impaired their liberty of thought; but Pragmatism is merely the technical formulation of the American spirit, anxious to find for a morality discredited by science a support that will enable it to sustain the social order and to restrain the vile passions of the human animal. It is thus essentially the ally of theology; indeed it is scholasticism up to date, the handmaid of a theology which in its turn is the handmaid of the Church. It is an attempt to save the beliefs in God, freedom and immortality which the few must inculcate into the many if social order is to be preserved. Only, as in view of the determinism of modern science its case is so desperate, it has to take the heroic step of absorbing all philosophy in morals. But the practical reason is irrational, and Pragmatism's use of it is worse than Kant's. Yet James is probably right in declaring that Pragmatism has come to stay; not, however, because it is true,

but because it is false. It may not seduce the Latin peoples, but it just suits the Anglo-Saxons. James and his associates have formulated a system of morals for the masses, and have "consecrated it as truth—in that they have outraged logic, insulted truth and compromised their own work" (p. 209). Is there no escape from this disaster? Perhaps in Europe, if the intellectual *élite*, regretting the abolition of slavery (p. 220), could resolutely reestablish social classes. But the best that can be hoped for is a compromise. "Since it is dangerous to allow life to be absorbed by philosophy, dangerous for society, we propose to adopt, for social reasons, a system of double truth, one philosophic and independent of consequences, another pragmatic, to be the philosophy of the people" (p. 237). Seeing that truth is bad and lying good, let us frankly recognise that mankind has a right to establish morals on false principles (p. 238). After that let the *élite* of the intellect devote itself unhampered to Pure Thought and French novels (p. 289).

M. Schinz's prescription for avoiding the 'triumph of Pragmatism' may strike the Anglo-Saxon reader as somewhat odd as regards both honesty and expediency, but it must not be supposed that he is solely occupied with the social side of Pragmatism. He attempts also to boil down its intellectual content to three doctrines. (1) Pragmatism contends that all purely intellectual systems have failed to satisfy, and that it is therefore time to try another method. (2) All actual knowing is, whether consciously or not, inspired by practical motives and depends on temperament. (3) The pragmatic criterion of expediency, therefore, forms a common measure for all philosophies.

M. Schinz replies to the first that the failure of other philosophies does not establish the truth of Pragmatism, to the second that even if all philosophies are subjective this does not render Pragmatism superior. To argue, moreover, from what all do to what all ought to do involves an invalid transition from psychological fact to logical validity. The third plea confuses moral with scientific expediency, though they have nothing whatever in common.

To estimate the value of this criticism it is in the first place necessary to examine the adequacy of M. Schinz's knowledge of pragmatic literature. He naturally and rightly puts James into the forefront, and has made an extensive, though not exhaustive, study of his writings. To Dewey's 'case' he devotes a special chapter, in which he seeks to prove that when Dewey declares that scientific judgments are dependent on human purposes and reduce to the type of moral, he must mean that moral judgments are ultimately of the scientific type. And he quotes extensively from the preface of *Humanism*. In all three cases, however, his knowledge shows gaps. He does not seem to have grasped the pragmatic import of the final chapter of James's *Psychology*. He does not know the *Talks to Teachers*, and so is perplexed by James's use of 'theory'

and 'theoretic' in what I have called a 'neutral' sense,[1] to the pitch of doubting James's consistency. Of Dewey's *Studies in Logical Theory* he makes no mention, and his book contains many allegations which he simply could not have made if he had ever read *Axioms as Postulates* and *Studies in Humanism*.[2] In short, he has entirely omitted the technically logical side of the subject.

The inevitable result is that he has gravely misunderstood all the three writers he criticises and the position he attacks. It will obviously be best, and probably sufficient, however, to prove this in full only in the third case. Here the astounding charge is made that the irrational is preferred to the rational and logic is thrown to the dogs (pp. 37, 77-79). This charge is abundantly refuted, not only by the writings M. Schinz has not taken into account, but by the very passage on which it is based. It all rests on a sarcasm to the effect that "if one had to choose between Irrationalism and Intellectualism, there would be no doubt that the former would have to be preferred" (*Humanism*, p. 6). Surely prudence as well as candour should have urged M. Schinz to read a few lines further down that Pragmatism "vindicates the rationality of Irrationalism, *without becoming itself irrational;* it restrains the extravagance of Intellectualism, *without losing faith in the intellect*". Similarly is it not absurd to treat as a repudiation of logic a doctrine which puts in the forefront of its programme a reform of logic by "a reverent study of the mind's actual procedures"? How could M. Schinz so completely ignore page x when he quotes page xi of the same preface *in extenso?*

In any case, however, what M. Schinz has failed to grasp is that the whole question turns on the relation of psychology to logic, and that Pragmatism is essentially a challenging of the assumption of an 'independent' and formal logic. To say that a truth depends on its consequences is simply a way of denying that any *formal* account of truth can deal with the real thing. Consequently the assertion he attacks (pp. 23-24) that the canons of true thought must stand in *some* relation to the procedures of actual thought, is in no wise an invalid passage from psychology to logic, but merely an innocuous truism. For how could a judgment exist for logic to contemplate, if no one had affirmed it? What could be the meaning, then, of a logic divorced from psychology?

It is failure to raise these questions and ignorance of the answers Pragmatism has given to them that tumbles M. Schinz into his whole vain antithesis of 'moral' and 'scientific' pragmatism. *Psychological* pragmatism is the connecting link between them which he does not see. "Moral" and "scientific" ends are alike objects of desire, and possible sources of satisfaction. Psychologically,

[1] N.S., No. 67, pp. 378-379.

[2] A footnote on p. 12 betrays the fact that he is unaware of the separate existence of this work, although its French translation is advertised at the end of his own book.

therefore, Pragmatism is inevitable, and 'disinterested' 'pure thought' is impossible. The only way of meeting this contention which has so far occurred to our really stalwart rationalists has been to show that psychology is impossible, and they have been engaged on this hopeful task for some years past. M. Schinz on the other hand has wholly overlooked that it is here that the shoe really pinches.

It should now be clear that Pragmatism has simple replies to M. Schinz's three arguments. (1) It is true that the failure of the other philosophies does not prove the truth of Pragmatism; but it leaves scepticism as the sole alternative to it.[1] (2) If all philosophies are really subjective, surely the only one, which has had the insight to see and the honesty to admit this, is the most worthy to be trusted. (3) Even though the ends of science and of morals are different and may often be divergent and sometimes discordant, the discovery that they are all fundamentally akin as satisfactions of man's purposive activity reduces them to a common measure, and indicates a real possibility of reconciling their claims.

It remains only to correct M. Schinz's strange misconceptions of the foes of Pragmatism and of the theological situation in America and England. He imagines (p. 147) that whereas James has a free field in America there is in England "a philosophy nearly a century old which is the very antipodes of Pragmatism. It possesses among its representatives Mill, Huxley and Spencer. It is they that must be reckoned with, and against them Schiller struggles." Why then did James dedicate his *Pragmatism* to the memory of Mill? Any Oxford undergraduate could have told M. Schinz that Mill had been stoned long ago, that Huxley was 'no philosopher,' and that Spencer had never been allowed to pollute the ears of incipient parsons. Page 148 betrays complete innocence of what Mr. Bradley wished to do to morality, as well as very careless reading of *Humanism*, pages 3-4. What again is to be made of this: "In America theologians do not all like this philosophy which is replacing theirs; Pragmatism is a bit too emancipated a theology for them," whereas in England "they already own Schiller, who is a spiritualist;[2] the aid of James, therefore, is far more precious. And they have not been slow to seize the plank of safety offered them by the American psychologist"? I can assure M. Schinz that the alliance of theology and pragmatism in England is his own discovery, and defy him to find a bishop (or even a dean) who has ever had a good word to say for pragmatism. The truth is of course that Pragmatism was chiefly provoked by the utter disregard of scientific method by *a priori* metaphysics, and that theologians had been far too extensively hegelised to show any more intelligent alacrity in grasping its bearings than their philosophic *confrères*.

[1] *Cf.* N. S., No..67, pp. 382-383.

[2] Of course in the Continental and not in the English sense of the term.

Lastly, M. Schinz should really reflect a little before he explains the whole rise of Pragmatism by national character with such reckless *abandon*. He does not indeed quite commit himself to the extravagance that philosophy is merely a matter of race and that Pragmatism is nothing but an irruption of bloodthirsty Anglo-Saxon imperialism into the intellectual world, as another 'Latin' writer has contended;[1] but the connexion he imagines between the American national character and the success of Pragmatism is a pure creation of his fancy.

As a matter of fact no view in the whole history of thought, not even Copernicanism nor Darwinism, has ever had a harder fight to win its way to the front. No view has had to contend against a greater array of inveterate prejudices, or has had to rely more utterly on sheer force of reasoning, hard thinking and hard hitting. No novelty has ever found the party in power more hostile; because none has run more sharply counter to the natural and professional bias of the public to which it was bound to address itself. The supposed consonance with Anglo-Saxon temperament, to which M. Schinz ascribes its success, was in reality its heaviest handicap. For it inspired its intellectualist enemies with the dread of desperation. They feared that the game would be up once the general public heard of Pragmatism, that their *prestige* would be gone and their supremacy ruined for ever. So they fought it at every turn and by every means, fair or foul. For many years they successfully burked it. Then they compelled it to become popular in order to obtain a hearing. It has become an academic subject mainly because the general public has *compelled* the professors to consider it.

But neither in America nor in England nor in France nor anywhere else has the academic world in general taken kindly to it. How could it? The academic world is naturally and inevitably intellectualistic, because it lives the intellectual life. Academic life selects the reflective types of men and intellectualises them still further. This effect is heightened by contrast and conflict in proportion as the academic life diverges widely from the ordinary temper of a nation. In countries like America and England the academic man is more or less denationalised and in conscious opposition to the national spirit. He naturally, moreover, prides himself on this difference and thanks his stars that he is superior to the vulgar. How then could he listen with patience to a doctrine which implied that the common man's instinct had been truer than his own, that his favourite pursuits needed to be vindicated by their social value, that his cherished 'dialectics' were chiefly an intellectual game, nay, that he had mistaken the nature of the very ideal of truth, to which he had always boasted his devotion? Pragmatism may be a gospel of peace and good will and

[1] P. 286 *n.*; *cf.* M. Mentré in the *Revue de Philosophie*, May, 1907.

toleration to the world at large, it may reconcile science and religion and further both ; but into the world of academic philosophy it could not but bring a sword and lead therein to slaughters grim and great.

Its success, therefore, cannot be explained by national character. For how was a nation to hear that its sages had at last begun to understand the *rationale* of its life? Pragmatism is *not* the work of the Great American People, which would have allowed its pedants to torment its youth to the end of the chapter with pathetic indifference. It is the work of James, the master of an incomparable style that could burst through the trammels of academic speech and touch the heart of the people. If James, the philosopher who fortunately for the world has never been *taught* philosophy, had remained a doctor, the unconscious pragmatism which pervades man's life and keeps it sane and sound, might have remained for ages as unsuspected as the law of gravitation until Newton came.

But by raising this issue, M. Schinz, in spite of the defects and *malentendus* which mar his book, has deserved well of philosophy. His popular style and even his avoidance of technical epistemology, will doubtless appeal to the democracy, and so possibly compensate him practically for the curious theoretical inconsistency that a man holding his views should endure the thought of contributing to the enlightenment of democracy at all. The 'intellectual *élite*,' on the other hand, for which alone he should conscientiously have written, may regret the absence of stiffer stuff, and it is permissible to doubt whether it will be altogether pleased with the way in which M. Schinz divulges and gives away the emotional basis of its objections to Pragmatism.

F. C. S. SCHILLER.

The Mystical Element of Religion as studied in Saint Catherine of Genoa and her Friends. By BARON FRIEDRICH VON HÜGEL, Member of the Cambridge Philological Society. London: J. M. Dent & Co.; New York: E. P. Dutton & Co., 1908. Two volumes. Pp. xxiv, 466; vi, 422.

THE author tells us, in his Preface, that he has, almost from the first, had "a vivid consciousness . . . of the massively virile personalities, the spacious trustful times of the early, as yet truly Christian" Italian Renaissance "from Dante on to the Florentine Platonists". "For those early modern times presented me with men of the same general instincts and outlook as my own, but environed by the priceless boon and starting-point of a still undivided Western Christendom. . . . The wish some day to portray one of those large-souled pre-Protestant, post-Mediæval Catholics, was thus early and has been long at work within me." The long and intimate study of the life and personality of St. Catherine gradually became merged, however, in the larger purpose "to utilise, as fully

as possible, this long, close contact with a soul of most rare spiritual depth—a soul that presents, with an extraordinary provocative vividness, the greatness, helps, problems and dangers of the mystical spirit. I now wanted to try and get down to the driving forces of this kind of religion, and to discover in what way such a keen sense of, and absorption in, the Infinite can still find room for the Historical and Institutional elements of religion, and, at the same time, for that noble concentration upon not directly religious contingent facts and happenings, and upon laws of causation or of growth, which constitutes the scientific temper of mind and its specific, irreplaceable duties and virtues. Thus, having begun to write a biography of St. Catherine, with some philosophical elucidations, I have finished by writing an essay on the philosophy of Mysticism, illustrated by the life of Caterinetta Fiesca Adorna and her friends."

This account of the origin of the book explains what is apt to strike the reader as a structural defect, namely, that the first volume consists of "Introduction and Biographies," and the second of "Critical Studies". The philosophical interest is practically confined to the second volume, and indeed to the first and the last three chapters of that volume. But to those who are interested in religious biography, and especially in the life-history of mystical souls, the first volume will appeal with quite peculiar force. The writer has certainly succeeded in making the personalities of St. Catherine and her friends stand out with remarkable vividness, and if a non-Catholic reader may be allowed to question whether the subject was worth the enormous labour in the investigation of the facts and the sifting of truth from error in the various sources, which the author has, in characteristic German fashion, brought to bear upon it, it cannot be questioned that the abundance of detail is valuable in producing the total impression of these rather obscure lives and personalities. And it must also be granted that the problem of the place and value of the mystical element in religion and in the life of the human spirit does gain in reality and concreteness of interest by being associated thus closely with the life of actual human beings. The interest of the central figure (St. Catherine was born in 1447, died in 1510, and was canonised in 1737) for the problem of the work is thus described by the author: "The very ordinariness of her external lot—a simple wife and widow, at no time belonging to any Religious Order or Congregation; the apparently complete failure of her earthly life, which gives occasion to the birth within her of the heavenly one; the rich variety and contrasts of her princely birth and social position, and the lowly, homely activity and usefulness of her forty years of devotedness; the unusually perfect combination of a great external action and administrative capacity with a lofty contemplation; the apparent suddenness and whole-hearted swiftness of her Conversion, succeeded by the long years of interior conflict and painful growth,

unhelped, practically unknown, by any one but God's inspiring Spirit, and these years again followed by a period of requiring and practising the ordinary mediate docilities; the strange nervous health of especially her later years, so carefully and truthfully recorded for us, a psychic condition interesting if but for her own lofty superiority to attaching any direct importance or necessarily miraculous meaning to it: all this, even if it were all, helps to give an extraordinary richness and instructiveness to her life. But stimulating, transfiguring, embracing all this, appears her special spiritual apprehension and teaching, of a quite extraordinary depth, breadth and balance, distinction and refinement" (vol. i., pp. 87, 88).

With the details of that teaching, religious and theological as it is, we are not here concerned; it is only as a contribution to the psychology and philosophy of religion that the book comes within the province of this journal. In the chapter (ix.) on the "psycho-physical and temperamental questions" raised by such a mystical mind as that of St. Catherine, the author enters into a careful investigation of the experiences recorded of her, in the full light of current psychological views, distinguishing the normal from the pathological phases, and the ecstatic state itself from the subject's management of it in the interests of the spiritual truth reached by means of it, and noting, in particular, that, except in one or two instances, there is no "disintegration of personality" or loss of the power to criticise the ecstatic condition, on the part of the subject. Generalising the results of his investigation of this case, he asks in conclusion: "Does not this type of apprehension, this, as it were, incubation, harmonising, and vivifying of their otherwise painfully fragmentary and heavy impressions, stand out—in their central, creative periods—as the one thoroughly appropriate means and form of their true self-development and self-expression, and of such an apprehension and showing forth of spiritual truth as to them—to them and not to you and me—was possible?" (vol. ii., p. 58).

Baron von Hügel's central philosophic position is that Mysticism is one of three main "elements of religion," the other two being the historical or institutional and the analytic, speculative or intellectual. All three are necessary to the complete upbuilding of the religious consciousness, and since each of them inevitably tends to monopolise the life of the individual in whom it is prominent and characteristic, each needs to be checked, as well as supplemented, by the other two. His special concern is at once to vindicate the claims of the mystical element and to point out its dangers, if left to work itself out unchecked by the intellectual and volitional elements. He describes it as "the faculty and action of the soul by which we have a however dim yet direct and (in its general effects) immensely potent, sense and feeling, an immediate experience of Objective Reality, of the Infinite and Abiding, of a Spirit not all unlike yet distinct from our own, which penetrates and works within these our finite spirits and in the world at large,

especially in human history; and by which we will, and give a definite result and expression to, our various memories, thinkings, feelings, and intuitions, as waked up by their various special stimulants and by the influence of each upon all the others" (vol. ii., p. 390). "It is especially this presence of the Infinite in man, and man's universal subjection to an operative consciousness of it, which are the deepest cause and the constant object of the adoring awe of all truly spiritual Mystics, in all times and places" (vol. ii., p. 340). He argues for the validity, as well as the necessity, of Mysticism as a kind of supra-rational, instinctive or intuitive mode of apprehending truth. "The most indispensable, the truest form of experience underlies reasoning, and is a kind of not directly analysable, but indirectly most operative, intuition or instinct of the soul" (vol. ii., p. 287). Speaking of Kant as the most consistent and influential, among the philosophers, in inculcating a non-mystical religion, he says: "It is deeply instructive to note how thoroughly this, at first sight, solid and triumphant view has not only continued to be refuted by the actual practice and experience of specifically religious souls, but how explicitly it is being discredited by precisely the more delicately perceptive, the more truly detached and comprehensive, students and philosophers of religion of the present day—heirs, let us not forget in justice to Kant, of the intervening profound development of the historical sense, and of the history and psychology of religion" (vol. ii., p. 260). Among such philosophers he names Simmel, Troeltsch, and Tiele; while among living psychologists whose investigations of the subconscious "have but confirmed and deepened the Leibnitzian-Kantian apprehensions" of the part played by the obscure, as compared with the clear, in our mental life, he names Janet, James, and Ward: "Without much dim apprehension, no clear perception; nothing is more certain than this" (vol. ii., p. 265).

The author insists, however, upon the necessity, if we are to avoid misunderstanding, of distinguishing the "true or inclusive" from the "pseudo-" or "exclusive" form of Mysticism, or what the Germans call "Mystik" from "Mystizismus," as denoting respectively "the legitimate and the (quantitatively or qualitatively) mistaken, share of emotion in the religious life" (vol. ii., p. 291). The "true, full dignity" of Mysticism "consists precisely in being, not everything in any one soul, but something in every soul of man. . . . And only thus does it, as Partial Mysticism, retain all the strength and escape the weaknesses and dangers of would-be Pure Mysticism, as regards the mode and character of religious experience, knowledge, and life" (vol. ii., p. 284). The check to emotional excess came, in the case of St. Catherine, from the side of the active and philanthropic life; in another it may come from the intellectual side, and the service of science and philosophy to the religious life is fully acknowledged by the author. "If brought face to face with many an Agnostic or Pantheist of the nobler sort,

who is in process of purification from such childish self-centredness by means of the persistently frank and vivid apprehension of the mechanical, determinist, thing-and-fate level of experience and degree of truth, you will, even if you have acquired certain fragmentary convictions and practices of religion, appear strangely less, instead of more, than your adversary to any one capable of equitably comparing that Agnostic and yourself—you who, if Faith be right, ought surely to be not less but more of a personality than that non-believing soul" (vol. ii., p. 384).

The chief defect of Baron von Hügel's book, regarded as an argument for Mysticism as not only one of three co-ordinate elements in religion, but the specifically religious element in human experience, is the absence of any clear statement of the underlying theory of knowledge and reality upon which such a theory of religion must rest. As the source of spiritual illumination, the mystical experience is the rival of clear intellection, and we desiderate some careful discussion of the comparative merits of the obscure and sub-conscious processes, on the one hand, and the clear and conscious, on the other, as sources of insight into the nature of ultimate reality. The author seems to assume, or at least to give very slender grounds for holding, the superiority of the former to the latter method of knowledge. After all, nothing is really gained by his distinction between Partial or Inclusive and Total or Exclusive Mysticism: this distinction simply means that the true and valid mysticism is mysticism checked or limited by action and intellection. Thus checked or limited in its operation, mysticism is accepted as valid. But the fundamental question is whether, or to what extent, mysticism, *as such*, is valid as a vehicle of spiritual illumination or as a revelation of the Infinite or Absolute Reality; and our answer to this question will depend upon our theory of the relation of the finite to the Infinite. The author seems to assume, rather than to prove, a view of that relation which favours the claims of Mysticism, with its detachment from the finite world of ordinary experience, as the channel of revelation or illumination. While he evidently holds that the ecstatic condition is not essential to mysticism, it is not clear what precise value he would attach to it, whether he would distinguish degrees or grades of mysticism, and if so, what value he would assign to each from the point of view of knowledge and of religion. And while he fully admits the dangers of uncontrolled mysticism or emotionalism, for the religious, as well as for the intellectual and moral life, he does not exhibit the relation of the mystical to the other two elements, and especially to knowledge, or show *how* they check and supplement one another. These various elements seem to stand over against one another, and to check each other's operation in an external and mechanical way. We never get anything like organic unity in the relation of the mystical to the intellectual and historical element. Against Herrmann's view that

"outside of Christianity, Mysticism will everywhere arise, as the very flower of the religious development; but a Christian is bound to declare the mystical experience of God to be a delusion," the author argues that, to make good this contention, Herrmann "has to define all Mysticism in terms of Exclusive Mysticism, and then to reject such an aberration," and in turn accuses the Ritschlian theologian of "exclusive objectivity" (vol. ii., p. 263). But we are not told what view of the relation of the mystical to the historical revelation the author would substitute for that of Herrmann. His own insistence upon the Neo-platonic sources of Christian mysticism, as well as upon the pantheistic tendencies of the latter, seems rather to favour than to discredit Herrmann's contention.

Such are some of the chief questions raised, rather than answered, by this interesting work. But whether we agree with the author's conclusions or not, we cannot fail to be impressed by his candour and sincerity, by his true catholicity of mind, and by the care and accuracy of his scholarship in many fields. These qualities give his book a value quite independent of the controversial issues with which it deals.

JAMES SETH.

Vorlesungen zur Einführung in die Experimentelle Pädagogik und ihre psychologischen Grundlagen, von ERNST MEUMANN. Zweiter Band. Leipsig: Wilhelm Engelmann; London: Williams & Norgate, 1907. Pp. viii, 467.[1]

PROFESSOR MEUMANN, in a preface to his second volume, desires to correct an error into which he asserts that many of the critics of his first volume have fallen. They have supposed, he says, that he wishes to make a sharp break with the pedagogy of the past; that he desires, as an American might say, to run a moist pen slick through everything and start fresh. I am not altogether surprised that his readers, even careful ones, have been thus impressed. For, after all, to be effective in reform, an author cannot too tenderly handle the views he rejects. And perhaps the sharpness of German controversial tone, apart from any particular hostility on Prof. Meumann's part to any view criticised, may have had something to do with the opinion found among some of his English and American critics—that his work threatened not so much to fulfil as to destroy. The author, however, says very pointedly that he has been misunderstood, and asks whether he would be likely to help forward the publication of the work of the great masters of the past if that were really his view; and we are bound to accept his disclaimer.

Quite sharply, the psychology and pedagogy of the immediate future will, among extremists, be sundered into psychology and experimental psychology, pedagogy and experimental pedagogy.

[1] For Critical Notice of vol. i. of Meumann, see last July.

But those who have absorbed the work of the masters of the past are in the most profitable position, provided they do not stagger under their load, to take up the work of to-day; and not only to decide between the conflicting views of the brilliant theorists who have passed away, but—a much rarer thing—to announce new truths on the basis of new work; for, in these days of co-operative specialistic research, only he who has an excellent memory can be truly original, as I. Zangwill, paradoxically but truthfully, tells us. With all this Prof. Meumann would, I think, agree; and those of us who are inclined to reverence rather than to criticism must remember that experimental pedagogy has had a big battle to fight, even in Germany; that the dust of conflict still hangs over the field; and that the quondam protagonists have not yet acquired all the urbanity which comes to the secure.

Prof. Meumann's second volume will, in my judgment, be found even more valuable and practical than the first; and it could not be either as valuable or as practical as it is unless it were at the same time as competently theoretical. Still it would be right to describe it as experimental pedagogy rather than as educational psychology. For the latter, an equipment in science is the main propædeutic; for the former, an equipment in the protracted teaching of children. Whereas the former volume traces the mental development of the school child, measured, as far as possible, by methods which, as Binet would say, are *extra-scolaire*, the present volume sets before us the actual problems of the school, and, as far as the present state of knowledge will permit, tells us how to set about solving them.

As is well known, Prof. Meumann is an experimentalist of distinction as well as a writer of books; and not only has he given us an admirable summary of the work generally, but is, in addition, able to refer us in detail to his own work on the questions at issue.

Those who look in this book for cut-and-dried decisions as to debatable points of school method will, I am glad to say, meet with considerable disappointment. There is nothing more irritating to those, few in number in every country, and fewest of all in England, who are trying to find out the best methods of education than to hear the easy omniscience of many so-called educational experts. If one could only put them under restraint until they had read this book, or books like it, they would emerge chastened and reflective, and the optimistic propagation of mere speculation would receive a severe and salutary check. Meanwhile, let it be the critic's function to point the way.

This volume is printed in eight long sections or chapters. At first it was a matter of regret to me that I had no space here to summarise the topics dealt with and the conclusions arrived at; but, on reflexion, I thought it was far better to send the reader to the book itself for those. Let me, rather, by the more extended

treatment of a few important issues, indicate in what way the author helps us to form our conclusions.

The chapter on Reading, the fourth chapter of the second volume and the fourteenth of the whole work, is the best summary of experiments and results on the teaching of reading which I know. It is more than a chapter, it extends to seventy-three pages, and might be more fitly called a book. The author sets out by making an analysis of the mental operations employed when a child learns to read. Then he discusses the Alphabetic spelling method, the Phonic spelling method, and the Word method. The first, he says, is weak because the sound of the separate letters is not known: the second is weak because children find it so hard to put the sounds of the single letters together—that fact, by the way, is usually suppressed in books of theory: and the third is based on the view that children can begin where adults leave off. Tested by results, he finds that, by the word method, children learn to read very quickly and very inaccurately; which is precisely the opinion I obtained from the study of the word method in practice in schools of Chicago and New York—very few, if any, English schools use it. He describes the method as one in which the whole word is taught without the elements—the letters—being previously learnt. May I suggest that the whole question lies there? What are the elements? The visual elements are, or may be, letters; the auditory and vocal elements, except after the patient and prolonged teaching of the analysis of sounds, are certainly *not* letters, but rather syllables: hence, indeed, arises all the difficulty and inadequacy of methods built up from one side only. Now, of course, as is pointed out, we do not want to analyse for its own sake; much of the analysis, if not all, will drop away; we shall only, therefore, use analyses which, by actual experiment, are shown to be sufficiently useful.

In Lecture 17, which deals with the analysis of children's drawing and methods of instruction in that subject, I may, perhaps, be allowed to express a special interest. When, some eight years ago, I penned a strong protest against the psychological analyses of children's drawings then current, which had, in my judgment, obscured and misinterpreted the facts, and were even to be found in work as excellent as Prof. Sully's *Studies in Childhood* (which I hope every teacher has read), I felt very lonely. 'Sensation' and 'Image' seemed to me, as they were applied in current psychology and its allied pedagogy, to be worse than useless as explicatory principles—yes, worse than useless; for, like the Froebelians of to-day, they force us to describe as imagination what is really inaccurate, or blurred and confused, perception. "The boy draws what he knows," I said, "and not what he sees or images." Without any suggestion from me, for I have no reason to believe that Prof. Meumann has ever seen my paper, he writes to-day: "Das kind zeichnet *was das kind* von den Gegenständen *weisz; nicht* eine bildnerische Darstellung dessen *was es sieht*" (Italics mine). He

follows, he says, the work of Kerschensteiner, Schulrat of Munich. And, as he goes on to argue, the adoption of this view puts all the conclusions of the former work more or less out of court. But, of course, we can only progress by piling up our experimental work from every point of view. One criticism only—Is the child's drawing quite as symbolic as Kerschensteiner thinks? But detailed points of difference are unimportant; the whole chapter is most valuable, and being a comparatively short one—thirty-seven pages only—it might be possible, pending the translation of the whole work which must come some day, to get this before more English readers than it will ever reach whilst in its original German form.

May I for a moment refer to something in the book which, to an English reviewer, is not wholly pleasant? Would not Prof. Meumann's criticism of Prof. Lay be equally effective if less vigorously expressed? And is there nothing to be said on the other side? In a polemic work, of course, one does not expect, though one may sometimes find stated, all the strong points in an adversary's position; but, in a text-book or general lectures, it is absolutely incumbent upon the writer to treat himself and his own views in an objective way. That Prof. Meumann can do this successfully is one of the most valuable features of the book. But does he quite manage it when the views of Prof. Lay are in question? The dispute, briefly, if a foreigner dare tread on so delicate a ground, comes to this: Prof. Lay attaches enormous importance to sensations of movement in perception; Prof. Meumann is disposed to regard their value as trifling, if not non-existent. I have long held, from observation of school children, that the *rôle* of movement in perception has been, up to now, grossly over-stated; and careful and exact work, like that of Prof. Charles H. Judd on Eye-movements and that of Drs. Rivers and Hicks on the vertical-horizontal illusion, is shaking the confidence of psychologists who had not hitherto doubted. Prof. Meumann has knowledge of all this, and the easy confidence of the opposing school is, doubtless, hard to bear.

Yet it seems to me there is a case on the other side, not only do movements, whether of eye or hand, bring objects within the range of perception, and that, too, in a progressive manner, part by part; but the movement may be itself a factor in the perception of an object; the object may *mean* so much movement. The precise conditions under which this latter state of things is to be found undoubtedly require specifying—they must not be taken for granted. Prof. Meumann undoubtedly accepts the first *rôle* of movement which is above specified. But does he accept the second? The whole discussion is to be found in chapter xv. on Writing and Spelling, which again I should like all English teachers to read; but I am afraid they would want to know a little more about the *exact conditions* of some of the experiments described before they felt much conviction from the results. Of course I quite understand that, in general lectures of this kind, much necessary detail

must be omitted; it is doubtless a defect incidental to a lecture system.

I should have liked to have given some sort of general summary of chapter xii. dealing with *Die Geisteshygiene der Schularbeit*, which we usually refer to as the problem of Mental Fatigue in school-children, though it is, of course, a much bigger thing than a problem of fatigue. I fear, however, my space forbids more than a general reference. There is no school question which has so powerfully attracted the amateur educationist, particularly if he happen to possess a medical or physical bias; and there is no question on which the good work done bulks so small in proportion to the gross total. Prof. Meumann's discussion is, throughout, fully informed, careful in statement, balanced in judgment, and eminently wise in conclusion. The results of his own work in the elementary schools of Zurich agree, in all essentials, with Prof. Thorndike's in New York, and with mine in London: we are now well past the early days of panic-stricken inaccuracy, and may soon hope to produce congruent results on which action may be safely based.

Also should I have liked to have followed the author through Lecture Thirteen, in which he discusses the relation between Experimental Pedagogy and Didactics. I might here refer English readers to the chapter by Prof. Adamson on Experimental Pedagogy in his *Practice of Instruction*, as covering some of the same ground.

In the section on Writing the author is admittedly working with small material. An interesting piece of work was done a few years ago by the Chicago Bureau of Child-Study, which he might conceivably have found useful.

The chapter on Arithmetic, he himself complains, must be short, "weil uns bisher eine ausreichende Analyse der rechnenden Tätigkeit des Kindes fehlt"; and so, perhaps, I may omit a more explicit reference.

Considering the work as a whole, I can but repeat what I said when reviewing the first volume. Prof. Meumann has laid us all under obligation to him. No educationist and no educational library in any country that counts at all educationally can afford to be without this book. Even in England, the so-called educational expert, who decides his educational ideals by personal partiality, and guides his methods by what Prof. J. Green, I think, happily calls "reminiscence," will shortly wake to find this way of doing things obsolete. Books like Prof. Meumann's, comprehensive and wise, will hasten the coming day.

This second volume, which, I understand, was published in 1907, shortly after the first, did not reach us till the last term of 1908; hence the apparently belated appearance of this notice.

W. H. Winch.

Identité et Réalité. Par ÉMILE MEYERSON. Paris: Félix Alcan, 1908. Pp. vii, 431.

IN the present work M. Meyerson set out, he tells us in the preface, with the idea that the problems of common sense could best be solved by examining the methods of science: a strict continuity between science and common sense being suggested. Now the methods of science are best studied by following the development of science. Accordingly the book has a two-fold object: to justify the assumption made as to the continuity in method between science and common sense, and to discover and examine the principles which lie at the basis of science. The latter comes first. Incidentally the author has wished to provide a kind of guide-book for the Man of the Future who will write an exhaustive "History of Scientific Method"; and the number of quotations from, and references to, writers of all nationalities and times is exceedingly great. This is indeed one of the best features of the book.

Two main principles present themselves at the outset as more or less antagonistic: that of law, and that of cause (ch. i.). It may be said on the one hand that the object of science is merely to discover the laws followed by phenomena; or, on the other hand, that what is sought are the causes underlying. If we hold the former, we shall explain "cause" as equivalent to "invariable antecedent". M. Meyerson seeks to separate these two principles as clearly as possible the one from the other, to show that they spring from two distinct human needs, and that neither by itself can avail anything in science; lastly, to discover what is the relation between them, and what is the significance of each. The principle of law springs from the necessity of acting if we would live; that of cause, from the impulse to know the why of things. The principle of law sets forth exactly how things change, expresses changes directly as a function of time. Given certain conditions X, certain results Y will follow after time *t*. Law thus postulates that things change in time, but that their change is independent of the particular space in which they happen to be. A difference is thus made between space and time. The principle of cause, on the other hand, postulates an underlying identity between cause, or antecedent, and effect, or consequent. The law of identity—that what truly *is*, is unalterably—is of the veritable essence of the human reason; and on it is based the principle of cause. "Le principe de causalité exige l'application au temps d'un postulat qui, sous le régime de la légalité seule, ne s'applique qu'à l'espace" (p. 27). It is to be noted here that for the author identity is the only principle of reason, and that it is interpreted in such a way as to exclude all diversity in time. Thus at the outset all change is branded as beyond the possibility of a rational interpretation. Change must either be absolutely unreal, or else must be accepted as unintelligible. We shall see later to what results this leads.

The principle of cause, by which scientists have sought to explain phenomena, has inevitably led in all ages to an atomism of some kind (ch. ii.). And though atomism presents innumerable difficulties of a logical nature (pp. 52-74), yet through it science has made and will continue to make most progress. Its ready acceptance by scientists is due to the fact that it satisfies our demand that something shall persist unaltered in time (pp. 82 ff.). The same statement applies to the three great principles of conservation—the principle of inertia, the conservation of matter, and the conservation of energy. They are all attempts to render more explicit the postulate that *something* must remain unaltered in time. Yet none of these principles can be derived entirely *a priori*. Nor can they be derived entirely from experience. They are "plausible," since they attempt, by reference to experience, to fill in a principle which comes entirely from reason (ch. iii., iv., v.). In these chapters there is abundance of historical matter.

Thus, it would seem, science *must* make use of the postulate, that something persists unaltered. And now comes the catastrophe. Time is from the outset emptied of some of its significance, for a purely mechanical process will run either backwards or forwards, whereas the world as we know it will run only in one direction. But further, we are gradually compelled to eliminate time altogether. In a mechanism, we can have change only in the movements of the atoms; but movement is rationally inconceivable (since it cannot be brought under the postulate of identity). It has indeed to be treated as an infinite number of very small intervals in which there is no change; and thus a consistent application of the principle of identity compels us to eliminate time altogether (ch. vi.). Further, the principle compels us to seek a unity in the atoms—and so we reduce them to an ether of some sort, which is then indistinguishable from space (ch. vii.). In these chapters there is much to criticise. It seems to us that, after reaching below change to something which persists, after seeking under the diversity of the atoms for a unity, M. Meyerson (as a consequence of his interpretation of the principle of identity) straightway forgets that he has arrived at his unity *only by such a process*, and that therefore this process must form an integral part of his result. And if (to consider the last point) when the scientist has reduced his electrons to singular points in the ether, we ask, How deduce the singular points *from* a continuous ether? we ask a question which we have no right to ask: for just because the ether has been arrived at by considering the electrons as singular points in it, they form an essential part of our conception of the ether. We may be justified in asking how the two elements in our conception can hold together, but this is not the question M. Meyerson asks. And the same applies to his treatment of time. Apart from the change, that which persists has no meaning: and we may ask how identity in and through change is possible, but we may not say, as M. Meyerson

does, that because we have reached identity, we have denied change.

In the next chapter, M. Meyerson shows that against this result science revolts; and the principle of Carnot issues. This postulates the *irreversibility* of phenomena; it renders more precise the conception of law. It states that the energy of the universe tends to take a form in which it is *unavailable* for doing work. Kelvin has thus called it the principle of unavailability of energy. "En effet, ce qu'il formule, c'est une tendance des choses à se modifier dans le temps. . . . En un mot, le principe de Carnot est solidaire du concept du temps et précise ce concept" (p. 261). The attempts of Maxwell and others to show that this principle is not incompatible with a strictly mechanical interpretion of the universe, are then criticised, and refuted. Here again we are in disagreement: it seems to us that the considerations which prevent M. Meyerson from accepting Maxwell's idea that the principle is *statistic*, would prevent us also from regarding a strict mechanism as reversible. I place three billiard balls together on a table, and with a fourth, scatter them. To reverse the process, I shall have to be able to move all four balls at once. And if each of these balls scattered another group, the reversal of the process would be still more difficult. Would not the task, in a more complicated case, be precisely on a level with the task of Maxwell's demon? And if mechanism is regarded as being reversible in spite of these difficulties, why persist in saying that Carnot's principle postulates real irreversibility?

Science having once more reinstated the change in the world, we are led to scrutinise the mechanical explanation a little more closely (ch. x.). Two groups then appear as entirely outside this explanation: the sensible qualities of things, which are left aside at the outset, and the interactions of the atoms (transitive action) with which we are left at the end. Being outside a rational interpretation, they are set apart as "irrational" (p. 272); and this, not merely in the sense that our human intelligence cannot explain them, but that no intelligence could. These two irrationals, it is suggested, have a common origin; for we *can* base our science on transitive action only because, in stripping off sensible qualities, we refused to strip off those derived from the sense of touch. Atoms thus remain hard, able to come into contact, etc.; and the fact that we cannot *explain* this proceeds from the fact that we cannot explain any sensible qualities. If we are thorough, we must strip off even this quality; and then our atoms have no qualities at all, and vanish. In chapter x. a new way is attempted. We may try to make our science, from the outset, qualitative. But a purely qualitative science would be sterile, and, once we introduce quantity, we are compelled to introduce it more and more, until our science is purely quantitative. In chapter xi. it is shown that the principles used by common sense unconsciously in building up the world, are the same as those used by science: and that, once common sense admits that things are not

exactly what they seem, it is driven on to become science. Common sense, equally with science, postulates that something persists unaltered; and, once it does this, it cannot stop. "Le sens commun n'est qu'une halte plus ou moins artificielle sur une pente constamment déclive. . . . Une autre halte, également factice, sur le même chemin, est constituée par le mécanisme" (p. 340). And the true end is—nothing. We cannot avoid this by trying to give up the principle of cause altogether. The principle of law would be compelled to destroy the concepts of common sense, and of itself, could build up no new ones. And without hypotheses of any kind, it would be worthless (pp. 346-348).

In chapter xii. the results already reached are summed up and stated more explicitly. On the one hand science cannot get rid of the causal explanations of things: and on the other hand these explanations can never be (logically) complete. Nature is not, and can never be rendered, intelligible. To demand that it should be so, is to demand that it should vanish. "L'existence même de la nature est une preuve péremptoire qu'elle ne peut être entièrement intelligible" (p. 365). Science, however, must proceed as if nature were intelligible; only on that assumption can it use the three great principles of conservation (pp. 368-369). And indeed scientific hypotheses do approximate more and more closely to reality (pp. 374-375). The theory which presents the *minimum* of irrationality "serait sans doute plus vraie, c'est-à-dire présenterait plus d'analogie avec la réalité, nous ferait découvrir plus de rapports entre les phénomènes, que toute autre" (p. 375). Yet the three principles of conservation show equally that science cannot deduce everything *a priori*. Thus science can be neither radically empirical nor abstractly rationalistic. Mechanical theories are not the *end* of science; they are essentially guiding conceptions, by means of which science advances.

M. Meyerson's conclusion, that reality is not and cannot be rendered intelligible, comes, we think, a little prematurely. Should he not rather have passed the inquiry on to metaphysics, and said, that since science shows itself thus inadequate, there is need to examine the assumptions involved in the procedure of science, to see if by any chance science has gone astray at the beginning? But doubtless readers of MIND have heard this often before.

M. Meyerson's treatment of time calls for some notice. Two points of view present themselves throughout the whole book, which we shall best exemplify by two quotations. On page 26 we read, "Il n'y a pas . . . analogie complète entre le temps et l'espace. Ce chien qui vient de naître, je sais qu'il sera adulte dans deux ans, décrépit dans vingt et mort dans trente ans au plus tard; mais si je le transporte dans une autre partie de l'espace, il restera ce qu'il est. Sans doute, si je le place au sommet du Mont Blanc, il se trouvera incommodé et, si je le maintiens au fond d'un étang, il sera asphyxié; mais c'est que les conditions physiques visibles du milieu

auront changé et non par le simple changement de lieu. Les objets ne se modifient pas sous l'action de l'espace comme ils changent sous l'action du temps." On page 377 we read, " Les atomes qui changeraient simplement dans le temps, changeraient sans cause ". These two aspects may not, ultimately, be contradictory, but as they stand they need unification. And M. Meyerson's drama, of the war between law and cause, depends on his viewing time now under the one, now under the other, aspect.

LEONARD J. RUSSELL.

Philosophische Strömungen der Gegenwart. Von Dr. LUDWIG STEIN. Stuttgart: Enke, 1908. Pp. xvi, 452.

DR. STEIN'S essays fall into two groups. Ten are directed to the task of orientation in regard to the main currents in the philosophical movement of our time. The remaining six deal somewhat eclectically with special problems—Toleration and Authority for example —in the light of results won in the historical inquiry.

The book cannot but be widely read. The student who, although philosophically trained, lacks the leisure or mental digestion necessary to deal satisfactorily with even a fraction of the multifarious reading which with the Bern professor is matter of course, will find here guidance of the sort he is looking for, as to what to embark upon, what to neglect. The essays, for example, on Neo-Romanticism and Neo-Vitalism could scarcely be bettered from this point of view. The sweep of the author's rhetoric, his weakness for antithesis, his fondness for a crowded canvas, detract little if it all from this service.

The first essay is on the revival of Idealism which Dr. Stein describes as the phœnix of philosophy with a period for its successive avatars of something like a generation. Its chief lessons are the provincial and self-contained character of the many schools and the extent to which the cleavage between intellectualist and voluntarist has gone. Under the latter heading Münsterberg's latest phase comes under review, and the swing of his intellectual sympathies is characterised. The effect is that of the recital of a *dossier*. There is an air of ' Classified, done with ' about Dr. Stein which must be something of a terror to those so distinguished as to attract his attention.

Second in pride of place is Pragmatism, to the discussion of the origin and tendency of which Dr. Stein has devoted particular care. He tracks out the catchwords of the movement with laudable industry. The Stoics, we find, besides supplying the formula of the Greatest Happiness of the Greatest Number are responsible for ' pragmatic ' in the required sense. Goethe and Nietzsche gave formulæ of a characteristic kind in more modern anticipations. It might have been added that the view of axioms as postulates is

traceable to Sigwart. The method, we find, dates from Protagoras and characterises Socrates even as he appears in Plato. Aristotle, too, with his supreme concept of activity and his teleology must be claimed as a forerunner. It might be objected that after all Aristotle declared decisively for the primacy of the speculative reason. But with all the genealogist's ardour to supply respectable ancestry to Doctor James's teaching, and its characterisation as essentially in tendency neo-positivism, there is no lack of specific criticism directed against pragmatism in its modern dress. There is, however, also on the whole much sympathy with the movement. Dr. Stein convicts the protagonist of pragmatism, we think fairly, of an ill-considered and paradoxical attitude towards Solipsism. Solipsism *salvis scientiis* is an untenable position. Prof. Stein also urges that the school has one notable piece of a-priorism, the teleological principle. This, he holds, has heuristic but not constitutive value. And he is inclined to oppose the whole position as eclectic to his own as critical.

The essay which follows is on Philosophy of Nature. It has Ostwald for its leading name, but there is much beside, of Schelling, of Mach, and of Petzoldt and the like. It is perhaps the least deep-probing essay in the book. Of much greater significance is the following study of *Neu-romantik*—the temptation to divide the word in another place must be resisted on philological grounds. Here the great names are Houston Stewart Chamberlain and Keyserling. The critique of the race-theory of the former is one of the most telling things in the book. Race, whatever it is, and it is much as material to work on, is in no sense a compelling force or fate in history. The subject is again taken up with effect in the constructive essay on the Sociological Problem. Chamberlain's work, with all its shortcomings upon its head, is so clever and so typical and yet so little known here that many will owe a debt of gratitude to Dr. Stein for the introduction.

The short essay on Neo-Vitalism, above referred to, introduces us to Driesch and Reinke. The theory of the latter, as presented here, is somewhat difficult of comprehension without some knowledge of the original. It is but seldom that Prof. Stein errs in this sort of regard. In contrast is the worthy presentation of the new realism in the following essay, the movement whose protagonist is Von Hartmann. Still more in contrast is the following essay on the evolutionist movement. Dr. Stein's grip of the milieu in which Spencer's life-work was accomplished, and his knowledge of even relatively minor controversies, *e.g.*, as to the suggested debt of Spencer to Comte, and of the way in which the influence of Schelling and Von Baer came in with the provokingly insular apostle of evolution, are exemplary. This essay and the discussion in the sociology essay later may be commended to English students.

Individualism is of course represented in the main by Nietzsche, but Max Stirner also finds a place. It is during the course of this

essay that the growing conviction of the cross-divisions to which we are committed becomes painful certainty. The currents are cross-currents. The defence of course lies in the dominance of the bookish tradition in modern philosophy, which makes us all build with materials such that only a master can divest them of the quality of casualness and cease to be eclectic.

Again a more important essay is the one on the movement, centred in the culture-sciences, which is worthily associated with the name of Dilthey. It is in substance a study of this distinguished writer as the following essay, on the movement to find philosophy in its history, is of Zeller. Zeller and what his name connotes need no advertisement in England, but the place of Dilthey in contemporary continental thought is less fully realised here. His is a non-dogmatic, even non-systematic outlook, and the fugitive form in which he has presented quite serious contributions to philosophic studies make it desirable that he should find a sympathetic interpreter. This he indeed does in Dr. Stein, who has the courage to compare him with Leibniz.

Even when we reach the constructive essays, there is still historical work to be done. That for instance on the sociological problem gives a characterisation of Ratzenhofer. Truly omniscience is something of a foible with our author. Sometimes not so much to the benefit of the reader as when it leads—as here—to a strenuous review of still another thinker. There are more than 600 proper names in the index to Dr. Stein's book, with references ranging from the hundred—literally—to Kant down to the one each to Burne Jones and Krapotkin. And the occurrence of eighteen proper names in five lines (p. 105) is not so very exceptional. There are some lapses, however, as was to be expected. The limits of human powers must find vindication. Some of the lines of development which Dr. Stein sketches out are unconvincing. There is one in which Duns Scotus is more than once 'the nominalist' and coupled with William of Occam. In another Spinoza is more than once so far ticketed as a naturalist that he is listed in the line of thinkers that begins with Democritus. Reid, too, is twice printed Read. Such napping is, however, quite infrequent in a book which comes so perilously near making culture hum!

Of Dr. Stein's width of reading there can be no manner of doubt. His power of bringing his reading effectively to bear in a constructive theory might perhaps be questioned. The essay on the Problem of Knowledge, for instance, attempts an irenicon between psychologist and 'logist' by means of the old formula of origin and validity. But to be effective it must be grounded, I venture to think, otherwise than as Dr. Stein grounds it. His Reason or Λόγος seems to have no function save the use to be made of it in the treatment of the Religious Problem. Psychological truth is φύσει. Logical truth, since it is human *Satzung*, is θέσει. The dynamic and humanist parties to the treaty of peace have really carried the day against the

critical philosophy as it opposes itself to psychologism. The reserves made in the name of spirit or reason are ineffectual. Reason itself seems to us on Dr. Stein's view little more than a psychological category.

In his admirable essay on Authority Dr. Stein uses the phrase 'psychological category' in rather a tell-tale way. It is independent of conditions of time and place, and so opposed to a 'historical category'. It is φύσει, he says, where the historical category is θέσει,—a little ago (p. 307) it was the logical category that was θέσει! The principle of Authority is permanent, as human nature. The specific forms which it takes are on the make and unmake and remake in its concrete subject-matter in the spatio-temporal world. Precisely! but how determine other than by dialectic in the Aristotelian sense, and only *ad hominem* that this or that belongs to human nature as such? The 'transcendental method' is hard of application to the evolutionary-genetic process if that be taken as ultimate.

Yet there is much to attract in these constructive essays. Those on Authority and Toleration, the one with its illustration from the law of habit, the other with its analogies from the natural sciences, are, taken by themselves, admirably expounded bits of popular philosophy. That on the Sociological Problem bites deeper. The Epistemological Problem and the Religious Problem, despite of the paradox of the confrontation of Schleiermacher and Feuerbach in the latter, are less effectively treated. And the essay which closes the volume, that on the Problem of History, leaves us when all is said—and up to a point admirably said—with the impression that we have to do with an essentially eclectic position.

We do not propose to discuss our author's views as to history in detail, whether there are general laws in history or only tendencies and the like, any more than we propose to follow him into detail as to Rickert and Lazarus, Poppers and Arthur Drews, Riehl and Hermann Diels, Marx and Windelband, and the cloud of other witnesses to the unrest of the time and the hope for the future. The book is a series of snapshots of the pageant of philosophy in 1908, and as such may be studied with advantage. It cannot itself with advantage be reduced to a single picture.

HERBERT W. BLUNT.

Wilhelm von Humboldt und die Humanitätsidee. Von EDUARD SPRANGER. Berlin: Reuter & Reichard, 1909. Pp. x, 506.

IT is not easy to estimate this work. As a study of the "new Humanism" in Germany and of Wilhelm von Humboldt's share in the movement, it is a very considerable achievement, and in many respects, I should suppose, an original contribution to the history of ideas. As an argument to establish a conclusion, or even to recommend a point of view, it seems wilfully to rule out

the most difficult and interesting problems, and to confine itself to results which one would not willingly call commonplace, but which, nevertheless, in depth and suggestiveness, fall short of what we should expect from such an investigation.

The fact is, that the author—a very able and well-equipped writer—has to some extent tied his hands by stating his problem in terms of W. v. Humboldt's ideas, to the limitations of which he is perfectly alive, but which, perhaps, have affected his treatment more than he has quite reckoned on. He has done this because his interest is, in a wide sense, educational. What he desires to analyse is the ideal of humane culture; and the fact of Humboldt's special devotion to the idea of humanity, together with a pleasant loyalty to the University of Berlin and to Paulsen under whom Herr Spranger studied, led him to attach his investigation to the life of Humboldt who was its founder.

Now this, as the author recognises, meant limiting the idea of humanity *prima facie* by Humboldt's "æsthetic individualism"; and intentionally, and not from any defect of knowledge, turning away from the great vista of the new objective philosophy, even in its bearing on idealism in fine art and on the question where true humanity is to be looked for. The positive idea of the book, apart from its very instructive detail, may be roughly outlined thus.

The conception of Humanity has in two periods pre-eminently stirred the world, and both times with reference to the same previous culmination—the prime of classical Greece. First in the Renaissance proper, and then in the movement of the new Humanism, the sense of a birthright of mankind, and of the claims of individuality in expansion towards it, were the leading motives of an age. At the threshold of the second movement stands not so much Shaftesbury, though a typical Renaissance spirit, as Rousseau, who began the transference from object to subject in culture as in politics. For it is this transference which, as in Rousseau, so in Schiller and in Humboldt, the author finds characteristic of the new humanism. The life-blood of culture as of politics was thenceforward to circulate through all individuals; humanity was actively and as a whole to enter on its birthright. This extended estimate of what Rousseau implied in his criticism of culture no less than in his "general will" is a striking point in the author's analysis.

The development of this new humanism is traced forward on German soil, and we note that Germany like every cultured nation is anxious to serve itself heir to the Greeks. The thread of the work consists of successive studies on the periods of W. v. Humboldt's development, more especially as defined in his relations to Kant and Schiller. (His later inquiries into the theory of language barely come within the scope of the book, except as a sequel to his interest in the conception of nature as a hieroglyphic.) In the account of the influences of the day we are surprised at the importance

attached to Shaftesbury. "An Universalität der Wirkung gleicht er den ganz Grossen wie Sokrates, Kant oder Leibniz," though "ohne Denker in strengstem Sinne zu sein". Is not perhaps too much here ascribed to one of many channels of influence? Ideas such as those of Symbolism and the Hieroglyphic of Nature (to which a special chapter is devoted) which were common surely to Dante and the whole middle age, not to speak of Plotinus, are traced back directly only as far as Shaftesbury and Leibniz.

However, the positive outcome is this. Attaching himself to the Kritik d. U. and to Schiller, Humboldt seems to have grasped the conception of a reconciliation of feeling and reason through æsthetic integration, and to have been inspired by the idea of the artist's attitude as that in which the whole man is appealed to, and as the true type of man's relation to his ideal. But, and this is essential, Humboldt follows Schiller in the transference of emphasis from object to subject. It is the man and his life that is to be æsthetically or artistically organised, and thus creatively to realise something fuller than a Kantian morality.

The ideal of humane culture, then, thus developed, either includes or transforms the ethical ideal, and the two are not in principle distinguished. Here, combined with the influence of Kant and Schiller, we again trace that of Shaftesbury. Throughout the whole set of conceptions the idea of an inward or spiritual beauty, of a beautiful soul, of the restriction of moral value to the inner life, is predominant. Such an attitude was nurtured in Humboldt by his early connexion with the Berlin "Seelenbund" of cultivated women, and remained characteristic of him throughout life. His ideal of humanity was never a world or a universe, but always a typical human being, or a gallery of such typical beings.

So we have to interpret his analysis of the ideal of humanity. Its moments were Individuality, Universality, Totality. That is to say, the particular or peculiar self expands by inclusion of human knowledge and experience, but only finds completion by returning into itself as a single concrete whole. The totality which is the goal cannot be a world of self-transcendence, not *e.g.*, a religious unity with the divine. The totality must fall within the typical individual. What one would surely hold to be Winckelmann's fatal mistake, the abstractness of ideal beauty, even the ascription of superiority to the sexless type because more generic than the sexual, was approved by Humboldt, and is so apparently by the author. So far as this interest in the type—the self-complete specimen—makes for personalism it has to do with the author's marked interest in Nietzsche. It will be noted that the positive and expansive meaning of individuality hardly appears in this analysis. It would supplant the notion of totality, and would leave open the problem whether a human being can be a true individual, instead of assuming its solution.

The author's analysis of the German movement towards an idea

of humanity during the period in question is immensely more elaborate and more complex than can be indicated in a brief outline, and he has undoubtedly done a valuable work in calling attention to the special character of the period in Germany, and to its correspondence with contemporaneous movements in France and England. His general conclusion is heartily to be welcomed. It is art, he says, which is the specific (as George Meredith has said of philosophy). What the life of to-day so profoundly demands is the temper of individuality saturated with a full experience of fact, and returning into unity with itself through the creation, by a quasi-artistic effort, or even through a new and serious growth of art, of fresh and adequate forms of living.

When however we scrutinise his detailed views and what they imply, some further remarks seem to be called for.

The author recognises, as we said, the limitation of Humboldt's ideas to an "æsthetic individualism". But if, as appears, his only suggestion for their amendment is a supplementation by altruism, we are still on individualistic ground. Now this individualism, this typical and specimen-like character of the ideal of humanity, is connected with the author's entire attitude and with the ideas of to-day which attract him. The æsthetic ideal is for him as for Kant and Goethe a generic idea bewitched. It is the logical synthesis of notion and individual, with a "plus," an "Überschuss," which is irrational, and is what makes it æsthetic. This æsthetic image arises by a "creative" act; it can only be experienced by being "lived," and its value can be recognised in this way alone. Thus, though more *than* reality, the æsthetic creation is not more *of* reality. The faulty side of Winckelmann's ideal, its antagonism with expression, and the misreading of Plato on which it rests, are retained, and are fundamental. The author does not seem to have been impressed by the coincidence between the speculative and the artistic revolt against the Academic Ideal, though strongly marked even in Schiller, and, surely, in all the better pictorial art of recent years. And therefore he does not place Winckelmann's greatness where for some readers it lies, in his implicit overthrow as contrasted with his apparent acceptance of the pseudo-Platonic "idea" which governed the earlier Renaissance. From this attitude on the author's part two things result. One is acquiescence in Humboldt's restriction of the *locus* of totality to the inner life of the specimen human being, neglecting Goethe's alternative, "Be a whole, or join a whole," to which a great English thinker has added the warning, "You cannot be a whole unless you join a whole". (For when it is recognised in the present work that it takes a society to symbolise humanity, that appears to mean only that you must have a gallery and not a single specimen.) And this restriction involves the very serious and practical defect that in discussing the idea of humanity nothing is said, from cover to cover, about its relation to the whole of actual mankind. It is assumed, and we welcome the

assumption, that the best is the most human, but the paradox that much of it, though not all, is also the least generic, should surely be handled in some way. The other thing is the acceptance of the latter-day exaggeration which connects creativeness with irrationality and denies that there is a logical foundation to the judgment of value, and sweeping into the realm of illogic the ethical judgment along with the æsthetic introduces unreason into the bases of life. And out of all this, because the idea is the polar opposite of reality, and can only represent it by receiving an æsthetic "Überschuss," there springs the extraordinary modern pessimism, which assumes that the more you know of "the facts" the worse off you will find yourself.

This latter doctrinairism is strikingly exhibited in the author's final rectification of the point of view of the great humanistic age. He takes it as obvious that our objective historical research endangers the transcendent charm of classical art, and that our objective social study annihilates the stability and security of our *moral*. In all this, it will seem to many readers, there are relics of the false idealism which belonged to a narrower humanism, but which it was the real work of the great creative age in Germany to supersede by an idealism which should not restrict itself to mere humanism at all. The question is so interesting, and seems so far reaching, that I will venture to illustrate it by a citation from a recent work of unquestionable authority in the field of art. "The high Renaissance pride and glow are apt to leave this bitter taste in the end. Absorption in man as the centre of the world and the hero of existence leads certainly to loss of that sanity and sweetness which an openness to the abiding presence of the non-human living world around us infuses into life. It is not by that absorption that we shall find the full meaning or animating power of our Western faith that in man the divinity is revealed."[1] In fact, the aristocratic human ideal cuts itself up by the root and withers for want of nutriment. It is just our objective study of social and natural fact that has given us to-day a new and more substantial human faith; it is just the objective study of ancient life and feeling that is beginning to inspire us with a wholly re-created vision for the ancient masterpieces. We need only think of what has been done for the loving study of Euripides in the last twenty years. The fault of humanism lay, "not in being too ideal but in being not ideal enough"; man is complete in the universe, not in typical persons.

B. B.

[1] Laurence Binyon, *Painting in the Far East*, p. 24.

VIII.—NEW BOOKS.

Man's Origin, Destiny and Duty. By Hugh MacColl. London: Williams and Norgate, 1909. Pp. vi, 201.

Readers of Mind are, of course, no strangers to Mr. MacColl, whose logical studies some of us have long learned to look upon as among the chief ornaments of our journal. In the present work, Mr. MacColl is directly addressing a rather different class of readers; his object is, in the plainest and simplest language to provide the numerous readers of the cheap editions of writers like Haeckel with an antidote, by bringing home to them a sense of the mystery in which the problems of human origin and destiny are still shrouded, after our present-day science has told us all it knows, and the utter vanity of the "popular philosophical" arguments against Theism, Providence, and the Christian hope of immortality. On the main issues involved the writer of the present notice must avow himself entirely on the author's side, and would unreservedly express his admiration for the skill and luminosity with which the chief points are made, and the happiness of the illustrations. There are points upon which I might feel bound to take a rather different view from Mr. MacColl, but they are of comparatively minor importance; in the main, I can only wish him a wide circulation among the large class of intelligent but unavoidably imperfectly instructed readers on whom the dogmatic metaphysics of a now antiquated school of biologists are being palmed off by the antitheistic press as the last word of wisdom. Would that some public-minded society would provide the funds for circulating a book like the present in a sixpenny edition as a counterblast to the sorry stuff which the secularist press is providing as spiritual pabulum for the inquiring artisan. I should like in particular to commend the excellent essays (Nos. 7 to 10) in which the distinction between the scientific theory of evolution as supported by biological evidence, and the "evolutionist" philosophy, as a supposed explanation of the facts of the universe, is driven home, and the absurdity of the supposition that "evolution," in the sense in which it is an established scientific truth at all, excludes intelligent direction of the course of events by God is triumphantly exposed. The tenth essay, on the "fallacies of Haeckel," in particular, is a most admirable piece of work, at once clear, untechnical, and unanswerable. I may be allowed just to mention one or two of the secondary points upon which the author seems to me hardly satisfactory. In the first essay we have a most ingenious argument for the reality of the soul as a non-physical agent; starting with the conceded fact that the whole body, except the nervous system, is non-sensitive, Mr. MacColl argues that the same thing may, on precisely similar grounds, be affirmed of the nervous system itself; the body, including the nervous centres, is not the real subject of consciousness. But the view is still retained that this subject is extended and occupies a region in the physical space of ordinary perception. Thus Mr. MacColl's contention against the ordinary material-

ist takes the form of maintaining that the "soul" must be *somewhere*, but the *somewhere* need not be "in the brain"; it may be millions of miles away. Now I should prefer to ask whether the question "where is the soul?" has any meaning at all. Is it more reasonable to ask whether *e.g.* my belief that 2 + 3 = 5 is *in* my brain or ten millions of miles away, than to ask what is the distance between Piccadilly Circus and the middle of next week? Mr. MacColl's ingenious comparison of the cerebral hemispheres to the receiving apparatus of a "wireless" telegraphic installation really amounts merely to the hypothetical addition to the nervous mechanism of an extension into some remote and unknown region of space. The "seat" of consciousness is removed to a distant and possibly extra-stellar point, but the question still remains whether there would be any sense in saying that thought and emotion are "at" this point? Does a thought or a feeling take up any extension at all? I think the author would see, on further reflexion, that the unity of our mental life, on his theory, would commit us definitely to the view that the soul literally is a mathematical point, and such a view is surely as unintelligible when that point is said to be millions of miles away as when it is said to be "in" the brain. The real absurdity surely lies in assigning presence "at" a point to the self at all. A rather more serious confusion seems to me involved in the contention that Ethics is impossible without a basis in "superhuman" authority. The author plainly does not mean that the good act only is good because it happens to be commanded by God since he holds strongly that it is not a meaningless assertion to say that God is good. Clearly then, there must be some way of knowing what conduct is good antecedently to our knowledge that God commands it. But if so, we can construct a doctrine of Ethics without needing to appeal to "superhuman authority". I suspect that what is really meant is simply that analysis of the facts of moral life furnishes *grounds* for belief in God, but I am not sure that the class of readers whom Mr. MacColl wishes to reach will not understand him to mean that no reason can be given for decent living except the belief that God, for unknown reasons, has seen fit to enjoin it. Similarly I cannot help feeling that Mr. MacColl shoots beyond the mark in postulating as necessary to an ethical Theism, the immortality of all sentient creatures. In the case of man, it is pertinent to argue from the facts of the moral life that we are constituted in such a way that we can only find our satisfaction in devotion to a good which cannot be attained under the conditions of our earthly life, but the grounds for such an inference are cut away from under our feet when we come to deal with the animals who seem, so far as our knowledge about them goes, incapable of living for the realisation of a progressive reasonable scheme of life. Their function in a rationally ordered world might be *merely* to "minister to the heirs of salvation". Unless, indeed, we are willing, as the author is not, to fall back on a metaphysical axiom of the indestructibility of substance.

Incidentally, I could wish more justice had been done to the ethical character of Greek religion. The immoral myths of which Mr. MacColl speaks really formed no part of what *e.g.* an Athenian believed as his religion. The "State" religion involved no beliefs at all; it was a mere matter of the due performance of a traditional ritual; so long as the rites were duly celebrated, a man was always at liberty to give them any theological interpretation, or no interpretation at all, as he pleased. A study of the theological teaching of the great tragic poets will make it clear that in the main the "gods," as objects of religious reverence, were looked on as the upholders of a social morality which, in its main principles, was identical with our own. And there is reason to think that most of the "myths" were actually unknown to the public at large. *We* have learned

them in the main from Alexandrine and Roman poets with whom they were merely a conventional body of stories for poetical handling in which no one believed, and which stood in no relation at all to conduct. Similarly, it is a pure mistake to talk of the fate of Socrates as proving the danger of propagating a pure religion at Athens. The *Republic* of Plato could never have been published at all if free criticism of myths had involved any kind of danger. The death of Socrates was due to purely political circumstances. He was condemned not for objecting to the tales about Zeus and Cronus, but for the much more serious offence of having been the friend of Critias and Alcibiades. The same thing is true of the other supposed victims of Athenian bigotry. Anaxagoras was never interfered with until the opponents of the "forward policy" of Pericles found it necessary to undermine his position by attacks on his friends; Aristotle's prosecution was a mere consequence of the outbreak of anti-Macedonian feeling which followed the death of Alexander. As for Protagoras, the evidence of Plato is really sufficient to dispose of the whole story about his having been prosecuted at all. And it must be remembered that in all these cases the real object of the prosecutors was not to take the life of the accused, but merely to give him an incentive to leave Athens before the case came on for hearing.

A. E. Taylor.

The Ethical Aspects of Evolution Regarded as the Parallel Growth of Opposite Tendencies. By W. Benett. Oxford: Clarendon Press, 1908. Pp. 220.

Mr. Benett has a ready pen, and a wide acquaintance with the great literature of ancient and modern Europe which makes his suggestive essay pleasant to read. But I cannot feel that he has really established what appear to be his fundamental tenets. Insisting rightly upon the teleological character of all moral development, he yet maintains that "the good," which is the goal of moral endeavour, is unknown and unknowable, and must therefore be unavailable as a standard by which to decide whether human history shows moral advance or moral retrogression. Further, since, according to him, 'ascending evolution' means simply growth in complexity, and a complex machinery is necessarily more liable to derangement than a simple one, he infers that, if we fall back on the empirical criterion of pleasure, or again of happiness (a term which is, unfortunately, left undefined throughout the book), pleasure and pain, happiness and misery, must have developed *pari passu*, there must be just about the same balance between the opposites at one age of the world's history as at any other. It seems, also, to be meant that the constant ratio between the opposites is one of equality. It would follow, of course, that we have no right to speak of moral progress as real. These positions do not appear to me to be made out. For the doctrine that the *finis ultimus* is unknowable no better reason is given than that we do not know what the detailed constitution of the Kingdom of Heaven would be like. No attempt is made to meet the grounds on which *e.g.* T. H. Green held that we can at least detect the general formal characteristics which have marked the tentative realisation of the "good" in the growth of society. On the second point the author has more to say, though the constant interweaving of considerations based upon the Hedonistic conception of good, which he himself rejects, with others in which good is identified with a vaguely conceived happiness which is not pleasure makes the force of the reasoning a little hard to estimate. I think, however, it will be felt that the appeal to empirical standards is vitiated by a fallacy of ambiguity. It is rightly argued that as civilisation develops

the *possible sources* of misery and suffering are multiplied; it is then assumed, so far as I can see, illogically, that the *actual amount* of misery is proportionately increased. Such reasoning seems to ignore the all-essential points that intelligence, as it grows, becomes constantly more potent as a factor in diminishing evil, both by enabling evils to be foreseen and guarded against, and by leading to the completer embodiment of the ideal of common good in social institutions. A man's brain is, no doubt, a more delicate machine than an animal's, a civilised man is more dependent on external circumstances than a Red Indian; but then the man is more capable of protecting and repairing the machine than the animal, the civilised man more capable of making provision against future contingencies than the Red Indian. I should have thought it certain that, to consider only life in our own country, the last three centuries have witnessed a marked increase in longevity, the extirpation of some of the most deadly diseases, the removal of a world of preventable suffering due to bad sanitation, unwholesome conditions of employment, social "exploitation" of one class by another, etc., etc., and that it is as certain as anything can be that these changes have increased human happiness and lessened human misery. So, to turn to the question of specific progress in moral goodness, it is true, as the author urges, that a wicked civilised man, in virtue of his superior intelligence, and his superior power of effecting his ends, may be much worse than a savage, but it does not follow either that the number of wicked men is not decreasing, or that the total balance of good over evil in the permanent results of the wicked man's activity is not increasing. Napoleon may perhaps have been a worse man than Tilly or Attila, inasmuch as his personal ambitions were more of a sin "against the light," but the very fact that Napoleon's social environment was so different from theirs that he could only achieve his personal ends by contributing to the social regeneration of Europe has caused the permanent effects of his activity to be almost wholly good. One might, in fact, ask whether a single campaign of Tilly was not as fruitful of misery as the whole career of Napoleon, and one is surely justified in adding that the career of Tilly, unlike that of Napoleon, was fruitful of little but evil. Similarly it might fairly be contended that the whole trend of modern social development is in the direction of the reduction of the *number* of "great bad men". As social organisation becomes more and more efficient it becomes harder for a career to be inspired by a triumphant anti-social purpose. The *a priori* argument to show that, at any moment, the balance of good and evil in the world must be exact strikes me as an obvious fallacy. The inference seems to run as follows. In virtue of the principle of the Conservation of Energy, the total energy of the universe remains constant, but good and evil correspond to increase and diminution of energy respectively; *ergo*, all increase of good is compensated by a corresponding increase in evil. Here I have to remark, (1) that the law of conservation is meaningless when applied to the universe as a whole, since it is solely and simply a law of *exchanges*; (2) that I see no reason to regard the minor premiss as true, and (3) that, since we have just as much or as little reason to regard the universe as a conservative system as we have to hold the same view of the individual organism; hence the argument would equally prove that there is no fluctuation in the "goodness" or "happiness" or "pleasure" of an individual man, which is manifestly untrue. Altogether I do not understand the view taken of the connexion of "energy" with "evolution". According to Mr. Benett, progressive evolution means the increase of "force," or the evolution of "energy". It is clear, I think, that "force" is here used in some sense unknown to science. "Force," for strict science, means, of course, simply "rate of change of momentum," and is therefore not the same thing as

"energy"; further, even if energy and force were the same, it would obviously follow, supposing an organism to be a conservative system at all, that the progressive evolution of force is impossible. I strongly suspect that like many other writers, Mr. Benett has confused "energy" with "energy available for work," and has forgotten the principle of "dissipation".

A. E. Taylor.

The Works of Aristotle. Translated into English under the editorship of J. A. Smith and W. D. Ross. Vol. viii. *Metaphysica* by W. D. Ross. Oxford: Clarendon Press, 1908.

The gratitude of all students of philosophy is due to Mr. Ross for his admirable translation, which in point of careful scholarship may sustain without blushing comparison with the German version of Bonitz, and has, of course, the advantage of all the work that has been done for the text and elucidation of Aristotle's *opus maximum* since the great German scholar's death. To write an adequate critical review of Mr. Ross's performance would only be possible by going through the whole task of reconstitution and translation again for one's self. Hence I shall attempt to do little more in this brief notice than call attention to the general lines upon which the translator's task has been carried out. In point of text, Mr. Ross is not, of course, in the position of some of his predecessors, who have been forced to construct a translatable Greek text almost *de novo*. In the main he has been able to take Christ's second edition as the basis of his work, though with a reasonable amount of modification, consisting chiefly in the restoration of readings of the well-known Laurentian MS. A^b, as against Paris E, the value of which Christ is disposed to exaggerate. In the matter of translation, Mr. Ross's aim has clearly been to produce a version which should serve rather as an illuminating commentary on the Greek text than as a substitute for it to the Greekless student. Hence he allows himself a degree of literality and stiffness which is, in my opinion, absolutely justified by his obvious purpose, but would hardly be in place in a version, if one should ever be produced, which should do for Aristotle what the late Professor Jowett's translation, with all its faults, has done for Plato. As regards the functions of the commentator, a middle course has been adopted, which tends, on the whole, as is only right, in the direction of parsimony. One thing which the translator has not regarded as part of his office, I could wish he had seen fit to do for us; that is, to supply references in the almost innumerable places where Aristotle is demonstrably, or all but demonstrably, recalling to his hearers specific passages of the Platonic Dialogues: the indication of the right reference, in these cases, is often the most illuminating of comments. Of course, in a work like the present there will always be places where diversity of opinion as to text, rendering or explanation are permissible, and I could indicate here and there places of this kind where Mr. Ross's treatment of a passage does not seem final to me. Thus in two passages dealing with Anaxagoras (984*b*, 17; 985*a*, 18) I think it an inexactitude, and perhaps an anachronism, to render *κόσμος*, *κοσμοποιία* by "world" and "making of the world". Surely the meaning in both places is "order, system," "the construction of order". The function of the revolution set up by the Anaxagorean *νοῦς*, as Aristotle knew well enough, was not to "make the *world*," but simply to sort out an orderly system from the primary *ὁμοῦ πάντα*. In fact, in the first of the two passages, the linguistic parallel (*νοῦς* is responsible for the *κόσμος ἐν τῇ φύσει* just as it is for the *κόσμος* and *τάξις* in animals) seems to force the rendering "order" upon us. Again, in 986*b*, 22, "the first

of this school of monists" hardly brings out the precise shade of meaning in *πρῶτος τούτων ἑνίσας*. *ἑνίζειν*, Professor Burnet has reminded us, is a colloquialism coined by Aristotle on the analogy of *μηδίζειν*, etc., and would be better rendered for us "the first to go in for the One" (query: Is there not a distinct allusion to Plato's metaphor, *οἱ στασιῶται τοῦ ὅλου*, "the party of the absolute," which Gomperz has misunderstood so oddly?). The occasional colloquialisms which remind us that Aristotle's "works" are actual lectures are too interesting a feature of his manner to be lost in translation. At 990*b*, 34, it seems to me that *οὐσίας*, Bonitz's conjecture, should have been taken into the text. Mr. Ross's own note shows that the sense required is exactly what this reading gives, "the *εἴδη* must be *of* substances," but his own way of getting this necessary sense out of the MSS. text, requires us to suppose that the essential point of the whole argument is left to the reader's ingenuity to supply for himself. I have enumerated these few points, almost the only ones in the whole First Book of the *Metaphysics* where I feel any serious objection to Mr. Ross's version, mainly to indicate the extreme carefulness and fidelity of a translation in which so little can be found to dispute over. There can be no doubt that the volume must henceforth be an indispensable companion to serious students of Greek Philosophy, and one can only express the hope that Mr. Ross will go on to lay us under deeper obligations by giving us in the near future such a text and commentary as must clearly have been before his mind in producing the present volume.

A. E. Taylor.

The Wisdom of Plotinus. C. J. Whitby. London: 1909. William Rider & Sons. Pp. 131-7.

Mr. Whitby's little work, besides being a welcome sign of the growth of interest in a great metaphysical system, gives, on the whole, a faithful account of the main positions of Plotinus. I am not, however, sure that it will be quite intelligible to readers who are not already versed in the history of Greek thought and Greek philosophical terminology. In matters of detail the writer is not to be trusted implicitly, since his knowledge of Greek philosophy seems to be drawn almost exclusively from the *Enneads* themselves, and it is not even clear how far these are known to him in the original text. Hence he sometimes expounds as specifically Plotinian views which Plotinus has taken directly from Plato or the Stoics. Thus at p. 95, the famous five categories of Plato's *Sophistes* are enumerated without any hint that they are not the discovery of Plotinus. At other times peculiar tenets of Neo-Platonism are ascribed to earlier thinkers. *E.g.*, on p. 93 the *αὐτοζῷον* of Plato is equated with the "second hypostasis" of Neo-Platonism, an interpretation which is at least open to question. A critical student would again be struck by the assertions that Plotinus was familiar with the "wisdom" of Pythagoras and Epicurus, and a master of "Oriental philosophy". No "Oriental philosophy" from which Plotinus could have learned anything is known to serious history. As for the "wisdom" of Pythagoras, of course Plotinus must have known such part of it as is incorporated in the geometry and arithmetic of Euclid, but the pretended "Pythagoreanism" accessible to him was, of course, a mere farrago of forgeries, and Epicurus was, from the Platonist point of view, no teacher of "wisdom," but an utterer of blasphemous folly. Plotinus did *not* say (p. 123) to Porphyry on his death-bed, "Strive to bring the God that is in us to the God that is in the All". Porphyry himself tells us that he was in Sicily when Plotinus died in Campania, and what Plotinus really said was "*I* am trying to bring *back* the divine in me to the divine that is in the All".

I think also that too much is made of an alleged "occult" or "esoteric" element in Plotinus. Plotinus has no "esoteric" doctrine at all, any more than Kant or Mill. He is just as anxious to make his whole position intelligible to any one who cares to understand it as any other philosopher, and though he is not always easy to understand, the thought of the *Enneads* is, I should say, less difficult to grasp than that of the *Critique of Pure Reason*. As for his concessions, if they can be called so, to "magic" and astrology, they really amount to nothing. The remarkable thing is that the demonology which was so rampant among the "Platonists" of the previous century has left hardly a trace in his pages. He does *not*, by the way, say that transmigration is a "universally accepted belief" (p. 79). Perhaps the French version on which Mr. Whitby seems to rely may represent him as saying it. It is curious that the admirable book of Mr. Whittaker on Neo-Platonism is unknown to the author, who complains of the lack of any "methodical exposition of the subject" other than that of Dr. Bigg. I hope he means to refer only to work in the English language; otherwise the ignoring of Zeller, Chaignet and Vacherot—to mention no other names—would be unpardonable.

A. E. Taylor.

A Study of the Influence of Custom on the Moral Judgment (Bulletin of the University of Wisconsin, No. 236). By Frank Chapman Sharp. Wisconsin: Madison, 1908. Pp. 144. 30 cts.

The object of Prof. Sharp's inquiry is to determine how far custom and external authority are really operative in determining the moral judgments of the individual. The subjects of the investigation were students of the University of Wisconsin, taken partly from the College of Letters and Science, partly from the attendants on the "Short Course in Agriculture". To obviate the possibility of unconscious influence of the professor or of theoretical ethical literature, the members of the first group were all selected from students not attending the University course in ethics. The method pursued was to propound a number of casuistical problems likely to suggest doubts about the applicability of some commonly received general rule of conduct, and to request the subjects to give a written answer Yes or No to the question, "Do you approve of the supposed course of action," supplying, where possible, a statement of the reasons for their judgment. In cases of need the written answers were further supplemented by oral questioning. In tabulating the results the method adopted was to classify the answers in two groups, rigoristic, *i.e.*, those which rejected, and latitudinarian, those which allowed the possibility of an exception to the generally accepted rule. Among the points of interest which emerge are the fact that in the answers from both classes of students the proportion of "latitudinarian" answers is remarkably high, but notably higher among the students of the College of Letters and Science than among those of the Agricultural Course, who, in general, had received little or no liberal education. There was a much higher proportion of answers accompanied by reasons among the "latitudinarians" than among the "rigorists," and, as might have been expected, the reasons for permitting breaches of rule nearly always proved to be based on "eudæmonistic" consideration. Prof. Sharp's conclusion is that the mere authority of custom plays a much smaller part in determining the moral verdicts of the individual than is ordinarily supposed. The answers to the questions were usually based on keen perception of some one of the many aspects of an ethical situation; which aspect shall be predominant depends upon the personal mental make-up of the subject. The essay concludes with some well-balanced remarks

upon the light thrown by the inquiry on practical problems of moral training. The author regards a careless latitudinarianism as the main danger to be guarded against, and lays special stress upon the necessity of bringing home to the student the less obvious reasons against readily allowing infractions of established rules to avoid hardships in some particular case. Incidentally I note his frank admission that the standard of general intelligence among American University students is being lowered by what he calls "the frank appeal made by the modern University to the instincts of acquisitiveness". May it be long before our ancient seats of learning in this part of the world allow themselves to appeal to anything of the kind.

A. E. Taylor.

The Economy and Training of Memory. By H. J. Watt. London: Arnold, 1909. Pp. viii, 128. Price 1s. 6d. net.

This little book is written for those who wish to gain a general idea of the outcome of recent experimental studies of memory. The results are clearly presented in popular language demanding no previous training in psychology on the part of the reader. Accordingly, no references are made to experimental data or to the papers in which the investigations were published; so that it is sometimes difficult for the reader to know how far all the writer's statements have an experimental basis. A chapter is appended at the close of the volume, giving twenty-three rules for the economy and training in memory. As the book will doubtless be widely read by teachers, another edition may soon be expected, when perhaps the following suggestions and criticisms will prove useful.

It is an error to say (p. 6) that "to remember an event is to recall it clearly and consciously to mind with the help of some clue". In a book of this kind, too, to speak in the following terms about Attention seems injudicious: "It does not seem at all probable either, that, when psychologists have done with finding out what factors influence attention for good or bad, there will be left any unitary process or anything at all which could be called attention. Attention is a popular name for a complex of states or processes of mind" (pp. 37, 38).

Probably few will be found to share Dr. Watt's optimism in regard to the unchanging efficiency of adult memory. He asserts (p. 30), "Every grown adult who keeps his mind mobile and is not suffering from weakness or disease, has as good a memory as ever he had".

After describing the effect of the distribution of repetitions upon memory, the author states (pp. 61, 62) that the discovery of this effect "leads to the important theoretical statement that an association which has been formed by repetition or any other means decreases in strength rapidly at first, more slowly afterwards, and then hardly any more". But this conclusion could have been easily drawn from far simpler experiments on the rate of forgetting. The important theoretical statement which might well have been mentioned in this connexion is that when two associations are of like strength but of unequal age, repetitions have a greater effect on the elder than on the younger. However, the size of the book obviously precludes a complete survey of the field covered by experiments on memory.

C. S. M.

Buddhism and Immortality. By W. S. Bigelow. Boston and New York: Houghton Mifflin Co., 1908. Pp. 75.

This is the Ingersoll Lecture for 1908, and contains a brief account of the attitude taken to the question of immortality by the Northern or Nepaulese

Buddhism as represented, more particularly, by the Tendai and Shingon sects of Japan. "A man consists of states of consciousness." There are three kinds of conscious states: sensations and emotions, which are set up respectively by external stimuli and by the inertia of the organic machinery, and volitional states, which are spontaneous, subjective and active. The two first are perishable, since they depend upon and share the character of matter; and matter, as conditioned by space and time, is separate and particular. Will, on the other hand, "underlies and overlies and permeates all other forms [of consciousness], and, moreover, . . . it can, if need be, *create* them. This last is the central fact. . . . Fully to realise this is to hold the key to immortality." Will is continuous, universal, imperishable. What we term the 'self,' however, is a concentration of the perishable and imperishable elements. And sensations that are often repeated tend to become stereotyped as habits. So arises what the West terms physical inheritance, and the East transmigration or rebirth of souls. But if the centrifugal overcome the centripetal forces in the self, the organic being realises itself more and more, until self becomes co-extensive with the universe. Nor is this a passive process; our will may increase our speed of travel in the right direction, and that in two ways: in the external way of doing good actions, and in the internal way, dangerous except for men of thoroughly good character or under the guidance of such men, by unmediated action upon character. The ultimate object of life, in any case, is to acquire freedom from the limitations of the material world, to substitute volitional for sensory consciousness. If we succeed, we pass first, beyond human life, to a stage intermediate between our own and the infinite consciousness, to a 'glorified celestial existence'. And finally, in the teaching of Buddhism, we pass still further, beyond personal existence altogether, to the peace of limitless consciousness unified with limitless will, which is the peace of nirvana.

P. E. WINTER.

International Arbitration as a Substitute for War between Nations. By RUSSELL LOWELL JONES, M.A. London: Simpkin, Marshall, 1908. Pp. 269.

This work gained the first of the five prizes which Mr. Andrew Carnegie offered as Rector of St. Andrews, and it is introduced with a commendatory note by Prof. Bernard Bosanquet. For a prize essay it is surprisingly good. It is no light task to write an account of International Arbitration from the dawn of history to the present day. But this is the task which Mr. Jones sets himself. Nor is he content with a mere summary of facts, but attempts to draw deductions bearing on present problems at every stage of his work. He has thus made a useful contribution to the ever-growing literature on this subject.

But it might have, perhaps, been better if the publication of the book had been delayed until Mr. Jones had digested all his material. A work on a less ambitious scale would probably have been more readable. Dealing with so vast a subject it was perhaps necessary to be didactic. But Mr. Jones is often needlessly so on points which have nothing to do with his subject, and thus irritates the reader. Why, for instance, should he commit himself to such a statement as "Turkey is the greatest military nation in Europe"? Nor is there any explanation of the serious omissions in the list of books consulted. It seems scarcely possible that one should not find there any reference to Prof. Westlake whose article on the subject in the *International Journal of Ethics* was reprinted in his book (vol. i., *Peace*). Hall is not mentioned, and the author does not

seem to have made full use of the *Revue Générale*. These faults mar the value of a work which is however full of suggestion and the result of considerable research.

C. K. Webster.

An Essay on the Distribution of Livelihood. By Rossington Stanton. New York and London: C. O. Farwell, 1908. Pp. 1-125.

This is one of those works that aim at the reconstitution of society, and it is perhaps fortunate that the writer has had the grace to be brief, since in 125 pages he finds space for an appendix and notes on industrial depression and the negro, in addition to the essay itself. Starting from the premiss that "no other object can possibly be conceived" than the "acquirement of happiness"—the latter being defined as the satisfaction of one's wants (p. 64)—the writer proceeds to outline what he considers to be an "equitable" system of economic distribution. This is to be reached by the gradual elimination of rent and interest, the former by means of taxation imposed by the State, and the latter by an enforced limitation of working hours. Such views depend upon a crude theory of value and, like other proposals, not fundamentally dissimilar, involve the gravest interference with the liberty of initiative of the individual. It is to the credit of the writer that he does not shrink from some of the practical issues of his views, as is shown by the suggestion that in certain contingencies population must not exceed a certain limit, if necessary "by reducing the number of infants as they are born to that point". Possibly, after all, the much-maligned demand and supply may be less unsatisfactory than the manipulations of that "insidious and crafty animal" described in a celebrated passage of Adam Smith.

L'Être et le Connaître. By H. Espinasset. Paris: Ernest Leroux, 1909. Pp. 490.

This book is a disappointment. We are promised a fresh discussion without the help of technical language; the result is a most irritating diffuseness in style and a total want of orientation in thinking. It is hard to say if there is a consistent view in the whole volume which can be pronounced upon as characteristic. The author has read a great deal, but he reads and writes faster than he thinks. Great names are bandied about as if they were so much pulp and summarily disposed of; in all cases, 'pour nous' is the criterion of Truth.

M. Espinasset does not give us a systematic treatment, but a series of reflexions and quotations whose connexion with each other is very precarious. It is good that mental stuff is woolly and easily gathers, or we could not say what M. Espinasset believes. As it is, we can only be sure of one thing—he believes in God. The position defended is a form of the New Realism. We perceive things as they really are, instinctively, intuitively. We need not ask how, we must have faith in our cognitive powers. The facets of Reality in knowledge are ideographic representations of the facets of Reality in Being, identical pictures or translations of them. This is his whole Epistemology (*v.* p. 290). Being has, therefore, the same characters without, as it has within, Experience. Yet, in spite of this identity, Being and Knowledge are totally disparate existents. *Être en soi* can be translated into experience, but is independent of experience. Whoever, therefore, interprets Being in terms of Sentience or any kind of experience, as in Leibniz's *petites perceptions*, denies the *être en soi*, and concedes no more than phenomenal reality to our presentations. This

charge is brought against Renouvier. For a somewhat similar reason, Locke, Mill and Bain are shut in to a pure Subjectivism, because they know of no reality which does not consist in modifications of experience, or, they know of no reality, *in itself*. There is surely confusion here. To say that a thing cannot have being-in-itself because of its relation to a subject, is not complete without we know who the subject is. If the object must always be part of my or your experience in order to exist, it certainly cannot properly be said to be ultimate reality. But may it not be its own subject, as is suggested in Mr. Bradley's Sentience, independently of its quite contingent relation to a particular knowing mind? And then it would be the only kind of *être en soi* which we can understand. M. Espinasset is clearly confusing knowledge with the empirical process of knowing. When he says: "l'être, pour *être*—une fois créé—n'a besoin que de lui; pour *être connu*, il a besoin, en outre, du percevant qui le perçoive" (p. 105), he raises a quite false distinction between Being and Knowledge. Being has no need of particular psychoses for its existence, but it has need very much of what answers to these psychoses whenever knowledge of an object takes place; the internal structure of Being must be such that it can be woven into the texture of particular experience.

The only satisfactory part of the book is the latter half of the chapter on "Dieu et Religion". Here M. Espinasset does some fine writing and makes one regret that he has kept us waiting so long. The dominating conception is Altruism, which he makes the common denominator of the three standing problems of Metaphysics. In Knowledge, in Ethics, in Creationism, it is the driving principle. Even in Knowledge, for the one, the Subject, must give way to the manifold, we must submit to the obligation to think Reality that we may reflect it faithfully. In this way an ethical significance is given to Knowledge, as may be seen in his treatment of Space, and for his moral earnestness and religious faith throughout, the author cannot be too highly commended. Space is viewed as the non-being or imperfection of Being; it is the feature of otherness in things, in virtue of which they are kept at a distance from the centre of Reality, so to speak, and therefore deprived of a full share in real existence. Time and movement heal the wounds of Space by converting the discrete void into a continuous medium; and Space as non-being is overcome when we come into touch with God. But this absorption of Space can only be complete when each individual will have suppressed the imperfection of non-being in himself. Space is thus the external counterpart of inner imperfection.

The attitude of Realism is mistaken. There is no one who would not gladly share the instinctive, catholic, faith of M. Espinasset's coalman (p. 32): "I would I were a weaver, I could sing psalms". But some minds are not built that way, and it is for them philosophy exists. A philosophical interpretation is not needful, it is not even good, for every one. But for some, whether professedly religious or not, Philosophy with its burden of technical expression is the only way in which Life can be brought to yield satisfaction; and if Realists can live in any other way, let them stand aside and allow philosophers to get on with their work.

R. A. C. Macmillan.

La Notion de Valeur; sa Nature Psychique, son Importance en Théologie. By Georges Berguer. Geneva: Georg & Co. Pp. 365.

This book, which is a Thesis presented to the University of Geneva for the degree of Th.D., is a treatise on the idea of value mainly in its relation to theology. The book is divided into three parts, of which the first is a

study of value undertaken from a psychological point of view, the second an examination of the religious fact of conversion in so far as it exemplifies the author's conception of value, and the third is a consideration of Nietzsche which seeks to support the author's thesis by the reduction to the absurd of the denial of an obligatory standard of values. The author in his second chapter examines the view that value is purely objective, and has no difficulty in showing its inadequacy. Every characteristic of objective value implies a subjective good to which it is the means. But on the other hand value is not purely subjective, it is always a relation between subject and object. In its primary form it is a sensible relation, but the author distinguishes it from sensation. The feeling of value contributes nothing to knowledge, and the author appears to hold that the objective term of this feeling-relation is unknowable, and that only the subjective can be attended to. On the subjective side value is connected with pleasure and pain. A clear distinction is made, however, between the feeling and the judgment of it. Sensible values are not all equal and the judgment of differences between them implies the use of a criterion. The supreme criterion is found in the sense of moral obligation; " . . . l'obligation morale s'érige en *valeur des valeurs* et se propose comme telle au judgment individuel ". It is moral obligation which constitutes all real value; the mere feeling has only a derivative and pseudo-claim to be called valuable. For a theory of value, thus, an examination of the nature of moral obligation is required. The result of this examination is to show that ethical values are unconditioned and cannot be derived. Further, obligation has a double aspect, dependence and freedom, and can be accounted for only if it is taken as the relation between two personal wills. The will which is the source of unconditioned values can be the will of God alone.

The second part of the book brings out the function of this supreme source of value in conversion. A purely psychological study of conversion is incomplete. It is, on the author's view, purely descriptive and fails to show the cause and motive force of the transformations which it describes. The author finds the real origin of the change in the subconscious, and in the end it turns out to be due to the will of God. This part of the book concludes with the statement of a parallelism between psychic states on the one hand, and on the other a consciousness of value which accompanies them without being reducible to them. Religion is largely bound up with the value-aspect of life, and consequently when science has completed its whole survey of facts there still remains a sphere for an extra-scientific study of theology as a manifestation of value.

The third part of the book in its criticism of Nietzsche shows that a denial of an absolute criterion of value ends in moral scepticism.

The author cannot lay claim to much originality in the views which he puts forward, but he compensates for this by lucid discussion of the main positions taken up by modern writers. His own point of view, however, requires a stronger defence than he gives to it. The position of the unknown objective factor in the feeling of value is not made very intelligible, and it is far from clear how such a feeling should be possible when all real value is made to lie in the judgment of moral obligation. The author's conception of duty is a somewhat formal one, and if moral obligation is the source of all value it is not easy to explain the appearance of values which conflict with it. Further, the legitimacy of the author's inference from the fact of a consciousness of moral obligation to the existence of a divine will as its ground and cause is not made out, and the step is taken without adequate discussion. Lastly, there is a tendency to regard the higher aspect of religion as falling in a sphere

which escapes scientific treatment, and to find it in the subconscious and the 'extra-scientific'. In view of the author's constant reference to Pragmatic writers, it is strange that he does not attempt to defend the separation of value and knowledge which his doctrine implies against the criticism which that movement in philosophy naturally suggests.

H. A. Reyburn.

La Philosophie Religieuse de Schleiermacher. Par Edmond Cramaussel, Docteur ès lettres. Genève: Librairie Kündig. Paris: Félix Alcan, 1909. Pp. 288.

In this careful and well-informed monograph Dr. Cramaussel presents us with a connected account of Schleiermacher's religious philosophy in its different phases. Biographical details are given in so far as they are necessary to shed light on the subject. And with Schleiermacher, more than most men, religious thought bears the impress of personal character. Dr. Cramaussel of course brings out the influence of the early education among the Moravians, though the fruits of this pietistic training only appeared at a later date. This episode helps us to understand a feature which runs through all Schleiermacher's work, the stress he lays on the inward and feeling-side of the religious consciousness. The writer then proceeds to trace the development of Schleiermacher's thought, beginning with 'The Discourses on Religion' and then dealing with the 'Monologues,' the 'Dialectic' and 'Ethics,' and finally examining 'The Doctrine of Faith'. This is done in a clear and painstaking way, copious references being given to the original writings, and the continuity as well as the differences between the earlier and later phases of thought being made plain. Schleiermacher's outlook changed, as must be the case with a man of wide and growing experience: in his early work the individual aspect of religion is prominent, while in the later the social aspect comes to the front. Both in youth and age, however, his devotion to the inner life of piety is conspicuous, and he has the advantage over other members of the Romantic School in being fitted to treat religion from the personal and vital side. The chief merit of the book before us is the lucid and careful exposition it gives of the evolution of Schleiermacher's religious thought. On the critical side the volume is much less full, though what the author has to say in this regard is generally relevant and sensible. But the frequent and lengthy notes in which M. Cramaussel records the judgment of a number of critics on points in Schleiermacher's religious philosophy can hardly help any one, though they are satisfactory proof of the author's diligence. For the reader is not shown the grounds on which these judgments rest, and he was probably well aware already that intelligent people can draw very different conclusions from the same facts.

Höffding has shrewdly remarked that Schleiermacher accomplished in his own person what Hegel thought he had achieved in his system, he united oppositions in a living unity. This is seen in his blending of deep religious feeling with keen critical and ratiocinative powers. He cannot lay claim, as Dr. Cramaussel justly says, to much originality as a philosophical thinker, and he is indebted to Plato and Spinoza, to Kant and to Fichte. Writers like Pfleiderer have emphasised Schleiermacher's obligations to Spinoza, but the view here is that, on the whole, he owed more to Plato and Kant. The important point, however, is that Schleiermacher was no mere borrower: he could vivify and give personal colour to what he borrowed and present ideas in new and striking combinations. What one misses in this volume is a sustained effort to appreciate the work of Schleiermacher in its general bearings, and to estimate his influence as a religious thinker. No doubt some attempt is made in this direction at the

close of the book, but it is too brief. I doubt if Dr. Cramaussel is right in supposing Strauss owed so much to Schleiermacher, and it was well worth making an endeavour to show the latter's influence on Ritschl and his school. On the other hand our author duly recognises that Schleiermacher was a pioneer in the Psychology of Religion and fully realises the importance of his idea, that religious doctrine should be the outcome and interpretation of religious experience. The book is provided with an index and bibliography.

G. Galloway.

La Théologie Scolastique et la Transcendance du Surnaturel. H. Ligaard. Paris: 1908. Pp. viii, 138.

An essay called out by the encyclical *Pascendi gregis.* The object is to show that the Papal pronouncement does not exclude the appeal to the adaptation of Christianity to our felt needs and emotional postulates from Apologetics. "Modernism" is to be rejected because, being founded on the theory of "immanence," it treats the religious life as a purely natural development of the soul's inherent tendencies, and so leaves no room for any real "supernatural" efficacy of divine grace. The Scholastics, whether Thomist, Scotist, or Augustinian, are unanimously agreed that the Christian's spiritual life is an effect of free grace, and strictly "supernatural"; apart from the grace of God, the soul possesses no more than a tendency, desire, or appetite to seek its true good in union with the eternal. It is only by the supernatural grace which is a free gift of God that we are enlightened as to the character of the eternal good, and the way to obtain it. Hence, while Apologetics may legitimately appeal to our felt needs as an argument in favour of there being a revelation, the proof that just the Catholic Church is the recipient and custodian of that revelation can only be found in the history of its foundation and growth. This side of Apologetics is, contrary to the Scholastic tradition, neglected altogether by Modernism. A well-written essay which should be of interest to many who are outside the Roman Communion.

A. E. T.

Über das sogennante Erkenntnisproblem. Leonard Nelson. Göttingen: Vanderhoek & Ruprecht, 1908. Pp. 427. 10 marks.

This volume is one of the Transactions of the School of Fries, that small but persistent band of thinkers who insist that the development of post-Kantian philosophy has been entirely vitiated by its neglect of Fries, but it deserves to be read and discussed on its own merits as a weighty and very interesting contribution to logical questions. The standpoint of the author is indicated by the significant word "sogennante" in the title, and perhaps still more clearly by the striking title of the first part—The Impossibility of Theory of Knowledge. Nelson's argument is that almost all modern philosophic thinking, intellectualist and pragmatist alike, is spoilt by its failure to observe that the test of knowledge can never consist in any discussion of the relation of knowledge to its object. For such a test would imply that we could get outside of the relation between knowledge and its object. But for that we should have to have knowledge of the relation of knowledge and its object: such knowledge would again have to be tested in the same way and so we are brought to an infinite regress. From this standpoint he examines the theories of knowledge of such different writers as Natorp, Marcus, Meinong, Simmel (who represents the Pragmatists), Rickert and Lipps. His analysis of their

failure to meet all the difficulties of a theory of knowledge and his explanation of why there seems no way of reconciling the different views of, say, Rickert, Meinong and Simmel, so long as the assumption involved in the words theory of knowledge is unexamined, is interesting and I think conclusive. His method of criticism is expressed in this sentence, page 80: "The contradiction which we have just revealed is not peculiar to the biological form of the theory of knowledge. It is fatal to every attempt which tries to *explain away* the independence and uniqueness of the objectivity of knowledge and to reduce it to something other than knowledge." But it may be asked, if there is no theory of knowledge, how can there be any possibility of discovering error. This difficulty, Nelson replies and surely rightly, rests on a false identification of *knowledge* and *judgment*. All judgments are true or false and therefore presumably can be tested. Knowledge is always immediate. Knowledge, therefore, ought not to be called true, or if it is, we should distinguish between such truth, as Nelson proposes to do, by talking of *Vernunftwahrheit*, which has no correlative of falsehood, and *Verstandswahrheit*, which has. But if knowledge is immediate and therefore, as Plato said, infallible, why judge at all? Are we not thrown back on a *naïve* realism or intuitionism? Nelson answers that "we must not confuse the relation of incompletely determined knowledge to completely determined knowledge with the relation of knowledge to its object". The process from incompletely to completely determined knowledge is mediated by judgments. But the completely determined knowledge does not consist in judgments though it is only made possible by them. The ultimate test of such judgments is not judgments of another kind but immediate knowledge. Surely any analysis of *verification* will bear this out. "The reference to something which is not itself content of knowledge but exists independently of its being known, is essential to the concept of knowing, and to wish to deny the right of this assumption is to deny the very fact of knowing. This right cannot indeed be proved, but it is a dogmatic prejudice that proof is a necessary or even a sufficient criterion of knowledge."

All this may seem to imply an identification of knowledge with perception and suggest that metaphysic is as impossible as theory of knowledge. Nelson answers this objection by the argument that all immediate knowledge is not necessarily perceptive. The failure to mark this was, he argues, the main mistake made by Kant. The difference between the objects of metaphysic and of perception is not in the mediacy or immediacy of our knowledge of them, but in the fact that we only become aware of the object of metaphysics by a process of reflexion on what is implied in our ordinary perceptual experience. Our knowledge of the principle of causation is as immediate as our knowledge of what we perceive, but it needs a process of reflexion to bring it to consciousness. "Perception Fries explains as that immediate knowledge of which we become aware immediately, *i.e.*, without the help of reflexion. A non-perceptual immediate knowledge would be that which while not having its ground in reflexion, could only come into our consciousness through the mediation of reflexion." The criticism of Kant on those lines which occupies most of the third part of the book called The History of the Theory of Knowledge is more constructive. Nelson argues, and with great force, that Kant's formal Idealism is a defect due to his failure to realise that not all knowledge is perceptive and shows at the same time that the actual movement of Kant's thought, say in the Deduction, is critical in the sense in which Nelson uses that word, that is to say, it is reflective, and its object is to lay bare principles implied in experience which when laid bare have only to be recognised. The most

doubtful part of the book is Nelson's account of reflexion as psychological or a process of inner experience. He does not, I think, make sufficiently clear the distinction between such a psychological method and mere observation, though he insists that the distinction is all-important. But to understand properly Nelson's position the book must be read. Enough has been said, I hope, to show that it is very well worth consideration.

A. D. LINDSAY.

Die Weltanschauung Spinozas. Dr. Phil. ALFRED WENZEL. Erster Teil: Spinozas Lehre vom Gott, von der Erkenntnis und dem Wesen der Dinge. Leipzig, 1907. Pp. viii, 479.

I must apologise for the lateness of the appearance of this notice, which is due to causes entirely unconnected with myself. The author writes of Spinoza with great enthusiasm, but unfortunately in a verbose and rhetorical style which makes his treatise anything but easy reading. Like most expositors of Spinozism, he seems to me to allow himself to be led by his admiration for Spinoza's personality into neglect of the logical incoherence of his thought. I quite agree with his view that Spinoza's ultimate object is to create a philosophy which shall afford a logical justification for an elevated and passionately cherished system of ethical and religious convictions. But the *philosophical* interest of Spinozism for ourselves depends wholly on the question whether Spinoza's attempt is a success. Dr. Wenzel seems to me to avoid the question by lapsing into adoring rhetoric whenever he approaches a real logical difficulty. Thus, as I understand him, he blindly accepts as his own what I should call the main absurdities of the Spinozistic position, the attempt to deduce the *individuality* of finite things from that of God, the denial that the spatial or temporal continuum consists of elements, and the combination of a doctrine of the way to human perfection with a nominalistic theory of knowledge, according to which "men" or "humanity" must be a name with no real object to correspond to it.

Starting with the view that all these positions are logical and consistent, it is not surprising that he should, like his master, find no difficulty in making the "intellect of God" stand alternately for a collection of truths, and for a *Gesammtgeist* or *Kollektivgeist* (whatever those words may mean) which knows those truths, or that he should continually tempt his readers to ask, as Spinoza himself compels us to do, whether, on his theory, the temporal sequence of events is not a *mere* illusion, and the belief that we ever have "inadequate" ideas about things a pure mistake.

These are difficulties inherent in Spinoza's own thought, and necessarily reappear in an exposition which starts with the naïve assumption that the *Ethics* is a masterpiece of rigid mathematical logic. But Dr. Wenzel seems to me to introduce fresh difficulties of his own by fathering on Spinoza ideas derived from Kant, Schelling and Schopenhauer. Thus I can find nothing in Spinoza's identification of "volition" (in the Cartesian sense of "belief," as he is careful to remark) with understanding to justify the repeated ascription to him of the doctrine of the "primacy of will," nor is the difficult conception of "knowledge of the third kind" made any less difficult by calling it "intellectual intuition". On one point, at least, Dr. Wenzel really detects a flaw in his author's reasoning. He refuses to admit that the existence of two and only two "attributes" involves any logical absurdity, and consequently insists on regarding the rest of the "*infinita attributa Dei*" as purely imaginary. But I am not over-satisfied by the reason he produces. He seems to hold that we

could deduce *a priori* the conclusion that there are two "attributes," and no more, because the two known to us are "contradictory opposites". But surely they are not so in the strict sense—"being conscious" is not absolutely identical with "not being extended," nor "being extended" with "not being conscious". Besides why, *a priori*, if God has one pair of *attributa* which are "opposites" should He not have other such pairs as well? The really illogical assumption is that the existence of a *finite* number of attributes would need logical justification at all, any more than the existence of an infinite number. Dr. Wenzel, like Spinoza himself, overlooks the point that exactly the same reasoning would prove that every body has an infinite number of dimensions. If there would be anything irrational in God's having two attributes and no more, it must be just as irrational that my body should have three dimensions and no more. The whole problem is a purely illusory one, and only arises for a philosopher who makes the attempt to look upon the individuality of finite things as an effect to be explained by deduction from the general character of the Universe as a system, *i.e.*, from treating the relation of God to myself as one of cause and effect. The same problem arises, as Dr. Wenzel appears not to see, from Spinoza's attempt to treat the laws of dynamics as "consequences" of the nature of "extension".

I note that the author seems unacquainted with any of the recent English Works on Spinoza beyond the *Study* by Dr. Martineau, and also that he unhappily supposes that the plural of the scholastic phrase *ens rationis* is *entes rationis*.

A. E. Taylor.

Gesammelte Werke. Von A. Spir. II. *Moralität und Religion, etc.* Herausgegeben von Helene Claparède-Spir. Leipzig: Barth, 1909. Pp. vi, 390.

The second volume of this reissue of Spir's Works has followed with commendable promptitude upon the first. It contains the view of morals and religion consequent upon the speculative position of *Thought and Reality*, a philosophy of rights, some miscellaneous essays and—last but not least—a sort of *cogitata et visa*, where paragraphs 32 to 34, on authority, miracles, and the relation of orthodoxy to research, go nearer to the heart of things than the formal essay on the reconciliation of religion and science.

The Ethic begins with Mill and Kant. From the former he accepts the analysis of what the empirical point of view can give, but takes it as a proof of inadequacy. From Kant he takes the conception of an autonomous will. The one categorical imperative is: act according to thine own true nature. This is to be found in no individual or egoistic self. That is part of the necessary illusion of life and contains elements alien to the *identity with self* which is the good or happiness. The noncongruity of the *perseverare in esse suo* taken egotistically with the unconditioned and self-identical which suffers no change is the antithesis of flesh and spirit, the *abnormity* of experience from the good as norm, which is at once the problem and the guide to its solution. In his doctrines of the activity of practical reason, and of noumenal or transcendental freedom Kant took away what he gave in the doctrine of autonomy. Spir's critical philosophy is indeed critical—of Kant.

Relative self-maintenance amid change of that which cannot but alter, thereby proving its lack of self-sufficiency, characterises the empirical self. Over against this we set the self-identity of the norm.

The same thought is worked out in the religious field. Religion is an uplifting above concrete work-a-day reality. Where it is not an imagina-

tive extension of force or power, either derived from experience or a fantastic completion of it, and largely a creation of fear, it is concerned with the ideal. Its psychological medium is feeling, not reason nor will. It is love for, feeling of affinity with, the higher non-empirical nature of Man and all that is. Good for good's sake, the norm to which empirical human nature fails to conform, but which is its asymptote, so to speak, is indeed one with God. There follows a discussion of individual immortality, which, in terms of Spir's speculative formula, is uncompromisingly denied.

Spir's philosophy of law is less directly and obviously the outcome of his main philosophical theory. Its central point is freedom, and the limit that freedom shall not extend to the negation of freedom. As applied notably to the right of private property, which is justified against Marx as necessary to freedom, limited as against Thornton *On Labour* lest it trench on living freedom with the force of the dead hand, it is of its age and generation. Freedom to consume his own fruits, yes. Freedom by a service in a definite time and place to bind eternally, no. Turn your product into capital and your right is *eo ipso* limited. And property in land is not and cannot be absolute, is a historic category justifiable if at all by the production that it achieves of the conditions of freedom. In this treatise Spir is Millian even to his view of population. He is oddly individualist in the contention that if the State undertakes even such functions as education, it must not be to the extinction of private competition. The essays on Du Bois-Reymond and Helmholtz, on What We See, on Brain and the Life of the Soul, bring out other phases of Spir's position. But they shift the emphasis, rather than add to the content of his philosophy. The remaining essays are more definitely expository of his formula. The world of sense and the persistent empirical *ego* are necessary illusions. Experience and the law of identity are in entire disaccord. That is the stimulus to the philosophy of the norm amid the flux of which it is the norm. The doctrine of the norm broadens out into a philosophy of truth, of moral autonomy, of a God, who if not creator and wonder-worker, nor yet pantheistic ground of all appearances, is sufficient in Spir's view to sustain aspiration and crown morality. So *Denken und Wirklichkeit* finds its completion in Spir's second critique.

HERBERT W. BLUNT.

Institutiones Metaphysicae Specialis. P. STANISLAUS DE BECKER, S.J. Tomus Quartus: Theologia Naturalis. Paris, 1908. Pp. 306.

A clear and succinct presentation of the neo-scholastic doctrines as now expounded at Louvain. The present volume deals exclusively with the doctrine of the existence and attributes of God. To English students in general the most valuable part of the book should be the chapter *de Pantheismo*, which contains a lucid exposition and refutation of the chief classic systems of Absolutism and "Transcendental Idealism" (Spinoza, Fichte, Hegel). In my own judgment the account of the theories in question is fair and excellently stated (though, of course, one cannot suppose that a disciple would accept it as correct on all points) and the "refutation" able, and, in its main principles, entirely sound. I cannot, however, help thinking that Father de Becker and the neo-scholastics in general, themselves retain what is the real source of all the "pantheistic" theories in their acquiescence in the traditional subject-predicate logic. The incidental criticism of the author on the Kantian rejection of theology from the list of the sciences should also prove interesting. Altogether, it seems desirable that we British

students of philosophy should make closer acquaintance with the very admirable critical work which Neo-Thomism is doing, from a standpoint unfamiliar to ourselves, upon the great constructive systems of the last three centuries. To anyone who wishes to understand where, in the opinion of a learned and orthodox Roman theologian, the weak points of modern speculation lie, I can heartily commend the present volume. I specially recommend it to the adherents of the still fashionable semi-Hegelian tendency as the work of an opponent who cannot be dismissed as simply misinformed; *fas est et ab hoste doceri.*

A. E. Taylor.

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IX.—PHILOSOPHICAL PERIODICALS.

Philosophical Review. Vol. xviii., No. 1. **H. A. Overstreet.** 'Change and the Changeless.' [In condemning change, we condemn it as disintegrative or augmentative; such change is defective because its presence means non-wholeness of life. But change may comport with thorough wholeness of life, as is suggested by creative work. This, in its perfection, is unhindered self-expression, and is therefore compatible with perfect being. The self-expression must be many and changing, not one and unchanging; objections to it, on this score, are based upon a false (quantitative) view of the self. An organic view of a dynamic self requires manyness of act, and therefore change; and change thus operates as the process of self-expression or creative activity of a changeless self. Time itself is defective as the expression, not of pure succession, but only of fragmentary succession; change in a perfect being may thus be regarded as change in pure or non-illusory time. These considerations give dignity and worth to human personality and striving.] **T. de Laguna.** 'The Interpretation of the *Apology*.' [The traditional view of the *Apology*, that it repeats the substance of Socrates' actual defence at his trial, has given way to the view that it is essentially a dramatic monologue. But we must then ask seriously whether the broader meaning which the *Apology* has for us could have been overlooked by Plato himself. That this question has not been asked is due to the general acceptance of the theory that the *Apology* is among the very earliest of the Platonic writings. But the arguments based on style, on logical fallacies, and on the treatment of immortality are not convincing; and, on the other hand, the *Apology* is ethically akin to the *Gorgias*, and as a work of art stands besides the *Phædo* and the noblest passages of the *Symposium* and the *Republic*.] **I. King.** 'Some Notes on the Evolution of Religion.' [Terms like fetichism, animism, and even monotheism, have no special significance as blanket concepts to be applied to the phenomena of primitive religion. The forms of religion are so definitely parts of the social *milieu* which produces them, that we cannot attempt to arrange them in a scale of higher and lower until we are able to evaluate the social background; and for this our knowledge is as yet insufficient. Comparative study must start from the assumption that in different social matrices there are specialised attitudes having in common functional elements that may be called religious. No religion is related to another save on the general ground that all are expressions of what man feels to be ultimate values.] **A. C. Armstrong.** 'The Third International Congress of Philosophy.' Reviews of Books. Notices of New Books. Summaries of Articles. Notes. **J. Watson.** 'Edward Caird.' **W. B. Pillsbury.** '*Attention:* a Reply.' **C. H. Judd.** 'A Rejoinder.' [Deal with Judd's review of Pillsbury's *Attention* in the

preceding number.] Vol. xviii., No. 2. **H. Münsterberg.** 'The Problem of Beauty.' [In what is called experimental æsthetics, it is always an individual feeling of pleasure that is to be explained by causal means. But a real æsthetics 'from below' must go to the naked facts of life. There, the æsthetic object is always an impression which comes to us as a meaning, as a manifold of energies, of suggestions, of demands. We seek to transcend these separate suggestions, with the aim of finding a world; and the beautiful is beautiful, not because it is agreeable, but because it is perfect, because every demand which is raised in its manifoldness is completely satisfied by the will of the other parts. The objective satisfaction resulting from the will to have such a perfect, self-agreeing world is the only æsthetic attitude. The attitude is possible, first, over against the immediate experience of life. If the purposes of outer objects harmonise, we have, in rare experience, the æsthetic value of natural beauty; the agreement of personalities in friendship and the harmony of wills in peace show us beauty in the world of other subjects; the complete mutual accord of energies and desires constitutes our own inner life as an absolute æsthetic value. Secondly, we have in art a systematic effort towards the attainment of æsthetic values. The fine arts give us the beauty of the external world; the literary arts the beauty of the relations of personalities; music the beauty of the inner world. Art implies isolation, because only the isolated eliminates connections, and therewith practical attitudes; and the elimination is necessary if we are to feel, in the given sample, the eternal perfection of the universe. Art again is unreal, but only as different from (not as less valuable than) the real; what is superadded, in the real object, is merely its pointing beyond itself; the unreal is self-complete. The worlds of inner agreement in beauty, of systematic connexion in truth, and of self-realisation in morality, are all absolute, but are disunited; they postulate a final value, and the demand is fulfilled by the belief in a transcendent unifying will, by religion. And if this ultimate self-identity is recognised without going beyond experience, we have philosophy. Darwinism and pragmatism have their place, but their relativism must enter into an absolute idealism.] **J. Watson.** 'The Idealism of Edward Caird, I.' [Shows the influence on Caird's thinking exerted by Carlyle, Goethe and Green. Caird and Green divided the work of criticism and exposition between them: Green devoting his attention to Hume and Mill, Spencer and Lewes; Caird expounding and examining the critical philosophy. The *Philosophy of Kant* is written from the point of view of Hegel, in whom Caird found a principle of reconciliation; the conception of the universe as an organic whole, every change in which is a phase of its self-evolution; and a principle of comprehension which is spiritual, and therefore manifests itself fully only in the life of man, with his self-conscious intelligence.] **F. Thilly.** 'Proceedings of the American Philosophical Association: the Eighth Annual Meeting, Johns Hopkins University, December 29-31, 1908.' Reviews of Books. Notices of New Books. Summaries of Articles. Notes. Vol. xviii., No. 3. **J. Watson.** 'The Idealism of Edward Caird, II.' [Caird uses idealism in the Platonic sense for the doctrine that man is capable, in virtue of his reason, of comprehending reality as it actually is; he thus regards psychology as impossible unless "the intelligence is able to understand the world, or . . . to break down the barrier between itself and things and find itself in them," and refuses to separate epistemology from metaphysics, since a knowledge that is not in some sort a comprehension of reality can only be a knowledge of illusion. This idealism is not only incompatible with what ordinarily bears the name, but is equally opposed to realism, new or old, as well as to all forms of empiricism. It sees

the vice of empiricism in the conception of reality as a collection of separate things; and in the consequent reduction of mind, when the same idea is applied to it, to a succession or a stream of feelings. Thus, current radical empiricism denies the complete rationality of the universe on grounds which imply that we can discern its partial rationality; but the denial of the one means the logical disappearance of the other. Moreover, the facts to which it constantly appeals presuppose a certain unalterable nature in the objects of experience; there is an underlying assumption that the world is a systematic whole. Caird's idealism, however, is not panlogistic; it admits no abstract contrast between the mechanical and the teleological conceptions of the world.] **J. M. Baldwin.** 'The Springs of Art.' [The springs of the æsthetic lies in the production of that which stands between the real and the unreal; in the restricted sphere in which the sort of imaginative construction styled semblant has its origin. Defining more closely, we may say that art is imagination determining itself through the impulses of imitative representation, and self-discovery and self-expression. Imitation, however, must be widely interpreted; the artistic impulse proceeds in the direction of ideal forms by a series of imitative reconstructions working upon the content once defined by the semblant imagination. And self-exhibition may be itself construed as essentially imitative, in the sense of a projection of an imitative or semblant self into the object. For forms of art-product whose principal spring and whose main appeal are 'expressive' nevertheless fulfil the laws of revival and representation, although the revival is oftentimes primarily affective, and only secondarily becomes cognitive (Ribot).] **E. Albee.** 'The Present Meaning of Idealism.' [Dogmatic materialism and subjective idealism are no longer relevant in philosophical discussion. The decision between modern idealism and realism requires the preliminary discussion of certain Kantian formulas, whose persistence is due to historical causes. Thus, progressive idealists no more than realists believe in the existence of *a priori* principles in the Kantian sense. Nothing can be 'merely given' as 'raw material'. Things-in-themselves are meaningless; subject and object have no meaning apart from their functional relation to each other. Hence space and time are forms, not merely of our intuition, but of experience itself, with which all philosophy has to deal; we may abstract from, but cannot transcend them. On the basis of these admissions it may be hoped that the partisan opposition between idealism and realism may presently disappear.]

Psychological Review. Vol. xvi., No. 1. **B. Sidis and H. T. Kalmus.** 'A Study of Galvanometric Deflections due to Psycho-physiological Processes, II.' [Pure ideational, even æsthetic experiences have no effect; but sudden violent emotions and especially intense sensory stimulations of very disagreeable character are followed by marked deflections. The results cannot be referred to resistance of the skin, to variations of temperature, or to circulatory changes with changes in concentration of the fluids of the body. They can only be due to variations in electromotive force of the body. Waller's work on the electromotive changes connected with the beat of the heart is, however, not confirmed.] **M. Meyer.** 'The Nervous Correlate of Attention, II.' [Schematises the neural conditions of automatic action and of the unity of consciousness. Discusses the relation of vividness to intensity, the question of the number of conscious levels, and the effect of attention upon feeling.] **E. E. Jones.** 'The Waning of Consciousness under Chloroform.' [Introspective report of three tests made by the writer. Hearing first breaks down, under the anæsthetic; then touch disappears;

then muscular control is lost; vision goes last of all. After all the senses have been damped down, there still remains an inner consciousness (memory, reasoning) which for the most part is perfectly normal. The most persistent ideas are some of the very first acquired in life.] **J. E. Boodin.** 'Truth and Agreement.' [Knowledge may be instrumental, either because it lies in a different dimension from the object it strives to know, or because it is a systematic arrangement, in the service of our purposes, of facts which themselves know no system. Here the question is how the facts seem to us, can be controlled by us. But knowledge is also of a sharing kind; the fulfilment of our purpose is conditioned upon partaking of an extra-individual realm of meanings, respecting and sympathising with them. Here the knowing attitude and the object are of the same kind, or belong to the same grade of reality; the knowing process is the nature of the object. We must recognise the complexity of reality in its various stages; we must be idealists or materialists, not as a matter of consistency, but variously, according to the claims we have to meet; we must neither assume, with the anti-pragmatists, an absolute system of truth with which all must agree, nor insist, with the pragmatists, that truth is not truth until it has been verified by the individual.] Vol. xvi., No. 2. **G. M. Stratton.** 'Toward the Correction of Some Rival Methods in Psychology.' [The variety of method in psychology is the sign of a healthy growth, and promises the future differentiation of a number of psychological sciences. At present, however, there is want of balance in the exercise of the methods which have to do with the significance or office of a mental fact, with casual explanation, and with analysis. (1) It is wrong to declare beforehand for either physical ends or psychical ends exclusively. We must tell what we find to be the value of the mental for the physical; but we must also state the value of the physical for the mental, and of the mental for itself. (2) It is wrong to declare against psychical causation. Our explanation would be better with less assurance beforehand as to the exact place where causes are to be found. (3) It is wrong to base analysis on the older idea of chemical analysis. We must recognise the importance of architectural plan, relations, modes of interconnexion; and we must not be surprised to find relations and connexions that have no counterpart in physical science.] **J. McB. Sterrett.** 'The Proper Affiliation of Psychology—with Philosophy or with the Natural Sciences?' [A paper of wide range, largely polemical in tone, and rich in quotations. The author would affiliate to philosophy all psychology proper, by which he seems to understand rational psychology (Harris) and the modern (perhaps experimental) forms of the older introspective psychology in so far as these operate with a *psyche*. Non-introspective experimental psychology, or hypopsychics, is no part of psychology at all; at best it supplements *psyche*-psychology. The introspective *Psychologie ohne Seele* serves no end, unless it lead on to a teleological construction in terms of a self-active and extra-causal self.] **W. H. Sheldon.** 'Analysis of Simple Apprehension.' [Simple apprehension is defined as a state just above the anoetic line, consciousness of a definite object, presentation with the single cognitive attribute of objective reference. It is independently actual and unexpectedly frequent in the mental life. In essential structure, it is a discriminated content. While the content is, from the standpoint of consciousness at large, marginal, it nevertheless usually has its own margin, and thus stands as relatively focal. Sometimes, it is true, the margin is not discoverable; then we must posit a physiological disposition, and say that the content is not in relation but in relation-germ. In both forms, simple apprehension is a logically primitive kind

of judgment; it possesses that intrinsic property of thought, liability to error. While the reality-feeling may attach to a content in isolation, there is an adaptation between the structure of simple apprehension and the function it performs as a mental process of belief; for belief against doubt involves recall of relations or context.] **H. H. Bawden.** 'Æsthetic Imagery.' [Æsthetic theory has to take account of both the sensuous and the ideal elements in beauty. Meanings must be put into concrete or sensuous form to arouse that matrix of organic and tactual-kinæsthetic sensations and images which furnish the core of pleasurable emotion essential to æsthetic experience. On the other hand, the æsthetic image is one which has incorporated a wide range of collateral materials of a sensory and emotional character into a relatively simultaneous synthesis. This image is free: the meaning must be organic with its sensuous expression or embodiment; and its content is relatively intrinsic: fine art is human production whose form is a relatively adequate embodiment of its content. In the highest art, the sensuous is controlled by the ideal element. Elusiveness of meaning is necessary to art: adequacy of form to content gives us repose, but elusiveness represents the factor of relative tension, of relativity in adequacy. Too great elusiveness, however, a mere statement of problem without or with but partial solution, is a defect especially of modern art.] Announcements.

American Journal of Psychology. Vol. xx., No. 1. **E. B. Titchener.** 'The Psychophysics of Climate.' [Shows that meteorologists have invented for themselves certain of the technical psychophysical methods (limits, equal sense-distances), and have traced some of the typical sources of error. Ends with full bibliography, and suggestions for further combined work.] **E. B. Titchener.** 'A Demonstrational Colour-Pyramid.' [Describes, with working drawings and half-tones, a painted model of the colour-pyramid, suitable for demonstration to large undergraduate classes.] **R. M. Yerkes** and **C. S. Berry.** 'The Association-Reaction of Method of Mental Diagnosis (*Tatbestandsdiagnostik*).' [Report of four experiments. Under ordinary conditions and with ordinary skill it may be demonstrated to a class of students that a simple list of associations, with their times, reveals interesting facts as to the contents of consciousness. No matter what method a subject may employ to conceal his knowledge, he is apparently sure to give the experimenter some clue which, if skilfully followed up, will reveal the truth.] **F. L. Wells.** 'Studies in Retardation as given in the Fatigue Phenomena of the Tapping Test.' [The phenomena of retardation are here studied according as they affect the curve of continued work. Changes in the curve that appeal especially associated with retardation are (1) a decrease in the amount of work performed (lowered average efficiency of the group investigated) and (2) improvement of work under conditions in which normal individuals would show a fatigue loss or no characteristic change. The improvement manifests itself in reversal (an intraserial warming-up, or warming-up within the individual series) and in transference (a pronounced tendency for the index of righthandedness to be lower, *i.e.*, for the right hand to be superior, in an experiment in which the use of the left hand precedes); it may be swallowed up in a very deep retardation. The retardation here measured is probably the product of Kraepelin's *Willenshemmung* and *Denkhemmung*; it must, however, be referred to immediately physiological conditions.] **R. R. Gurley.** 'Chapters for a Biological-Empirical Psychology.' [The data of a science of psychology must be orientated about the electrical anomaly of carbon and the conception of a neurological dynamism. With this

starting-point, the writer seeks to explain the principal varieties of nervous action, and especially to solve the cortical-psychic problem. Three mental elements are recognised, and distinct molecule-types are posited to account for non-lapse of sensations and their functional dependence on intensity of stimulus, for lapse of thought, and for non-lapse of feelings and their functional dependence on intoxication-conditions. There is every reason for holding that all psychical, along with all physical facts fall under the law of the conservation of energy.] **J. H. Lueba.** 'On Three Types of Behaviour: the Mechanical, the Coercitive (Magic) and the Anthropopathic (including Religion).' [A comparative study of these three modes is the shortest way to an understanding of the origin of religion. Animals show mechanical and anthropopathic behaviour, but the latter only towards beings present to their senses. Religion, which is anthropopathic behaviour towards unperceived and, in lower races at least, always personal powers, and magic, which is the art of using an impersonal, non-mechanical power to coerce things or persons, are found only in man. Man thus differs from the animals in that he can imagine and by speech keep in mind unseen personal agents, and can maintain practical relations with these beings, and employ supposititious impersonal forces, despite delay and frequent failure on their part to perform what is expected of them.] **L. R. Geissler.** 'A Critique of Professor Wirth's Methods of Measurement of Attention.' [The difficulties of Wirth's method and the many factors that complicate his observations obscure the real nature of his results and rob them of any decisive significance. The tachistoscopic arrangement is, in general, unfavourable to a solution of the problem.] **A. de Vries and M. F. Washburn.** 'Minor Studies from the Psychological Laboratory of Vassar College, x. A Study of Retinal Rivalry in the After-image.' [When through the effort to hold a colour the duration of that colour in the original image is lengthened, the negative after-image is not longer than it is when no effort at control is made. The explanation is motor; the effort implies eye-strain, while the observation of the after-image implies a passive attitude of observation.] Psychological Literature. Book Notes. Notes.

International Journal of Ethics. Vol. xix., No. 3, April, 1909. **N. Wilde.** 'The Meaning of Evolution in Ethics.' [Discusses mainly the relation between the evolution of morality and its standards. "Moral evolution is a process of rational selection in which the individual is a conscious factor. We ourselves are deciding what the outcome of the process is to be, and hence we cannot use the idea of that outcome to determine what we shall decide. . . . We and our ideals are factors, not merely products of evolution. The term moral evolution is only a name for a certain continuous progress made through the efforts of rational men and women in working out their ideals of life, and therefore presupposes such ideals. So far, then, is evolution from being the explanation of our moral judgments, that, on the contrary, our moral judgments are the explanation of evolution."] **D. H. MacGregor.** 'Some Ethical Aspects of Industrialism.' [Emphasises the need of *personal sympathy* and *personal reforms* as the chief factors for the improvement of present industrial conditions. "Modern industrialism is in danger of becoming, if it has not become, pervaded by the spirit of the doctrine of evolution, whose regard for the individual is far less than its regard for types, for stages of progress, for new levels of life. . . . Evolution and the idea of the 'long run' are apt to make us callous to personal rights and values. Industrial activities and ideals are ahead of others, and the need is for a more equal pace with religious and ethical ideals."] **R. C. Brooks.** 'Attempted Apologies for Political Corruption.' [Various lines of apology are stated and

redargued. Contends that none of them stands investigation, and insists on the social necessity of working for the limitation, and ultimate elimination, of the evil.] **F. Granger.** 'The Meaning of Experience for Science and for Religion.' [Science deals with abstract aspects of experience, and assumes a general and disinterested attitude towards it which is different from the standpoint of the individual. Yet there is a likeness between the prophet of science and the prophet of religion, and there is a revelation of nature through science as well as a revelation of life through religious experience. Philosophy seeks to fuse again into one the several aspects of experience, so as to reconstruct it as a whole; and the harmony at which it aims is apprehended in vague outline in the dream of the poet and the vision of the prophet, and through faith by the common man.] **E. B. Bax.** 'A Socialist's Interpretation of Ethical Evolution.' [There are three stages in the evolution of the moral consciousness—(1) that in which the individual is merged in a social group; (2) that of the autonomy of the individual, or his direct relation only (and in a mystical way) to the infinite and universal; (3) that of human solidarity and social utility. The fundamental concept of morality is that of justice or equality, which in turn has its root in the *feeling of sympathy*. This principle of equality, which is the foundation of all moral conduct, modern socialism explicitly adopts as its ideal, and claims for the first time in history to furnish the possibility for its realisation.] **W. R. Hughes.** 'An Experiment in Social and Religious Education—The Alpha Union.' ["An educational union founded on the acceptance by its members of the belief that man is an essentially spiritual and progressive being, and aiming to make this the common and leading principle in working out, theoretically and practically, the development of the individual in the common life." Explains its origin, its aims, and the beginning of its work.]

Journal of Philosophy, Psychology and Scientific Methods. vi., 2. **R. B. Perry.** 'The Hiddenness of the Mind.' ["In certain respects a mind can only with great difficulty be known by another," but "this does not imply the absolute impossibility of knowing the other mind".] **C. H. Judd.** 'What is Perception?' [Continues paper in v., 26. Perception should be described as it now is and as constantly referring to past experience, but "formalism without limit has come into our psychology with all these hypotheses about added memory elements and added sensory factors". A percept is not "a kind of rationally constructed argument with oneself in which one builds up a huge complex of factors into an elaborate mental process".] Baltimore Meeting of the American Philosophical Association. vi., 3. **F. C. Doan.** 'An Outline of Cosmic Humanism.' [Thinks that as "all but the most stiff-necked and unregenerate of the younger English-writing philosophers have long ago adopted the pragmatic method," pragmatists should "apply their energies to cultivate the world-ground which they have already wrested from their hereditary foes". The first crop is apparently a subconscious will.] vi., 4. **C. H. Judd.** 'Motor Processes and Consciousness.' [Discusses current theories and concludes that "unity of percepts and unity of ideas are phrases which describe an aspect of consciousness dependent on motor tendencies . . . the motor phase of the process is general and subjective in its character, while the content factors are particular and in themselves unorganised".] Baltimore Meetings of the American Psychological Association and of the Southern Society for Philosophy and Psychology. vi., 5. **R. B. Perry.** 'The Mind's Familiarity with Itself.' [Concludes that "the mind is familiar and intimate with itself to an extraordinary degree, but this . . . is as much a symbol of confusion and bad habit as it is of knowledge. What exclusiveness it has it

owes not to its insight but to its incipiency and arbitrariness—so far is it from constituting a final revelation of truth.] **H. M. Sheffer.** 'Ineffable Philosophies.' [Those "based on premisses which, for whatsoever reason, lead to no logical deductions, and thus render the questions of coherence, incoherence, consistency, and contradiction altogether meaningless. They may be divided into philosophies of (1) 'illusion,' such as mysticism or McTaggart's 'Hegelianism'; (2) of transformation, such as Rickert's, and (3) of completion, such as Joachim's."] vi., 6. **J. E. Creighton.** 'The Idea of a Philosophical Platform.' [Thinks it may be found in a study of the history of philosophy.] **B. C. Ewer.** 'The Time Paradox in Perception.' [As perception takes time, can we ever perceive the object *as it is?* Do we not always perceive it as it *was* and may it not have disappeared in the interval? Answer: This paradox makes no difference to the pragmatic presence of the object.] **E. B. Talbot.** 'Humanism and Freedom.' [Discusses the essay on Freedom in Schiller's *Studies in Humanism* from a dogmatically deterministic standpoint and consequently begs the question.] vi., 7. **R. B. Perry.** 'The Mind Within and the Mind Without.' ["Precisely as introspection obscures the instrumental and motive factors of mind, so general observation obscures its objective factor. . . . The natural mind, as here and now existing, is an organisation possessing as distinguishable, but complementary, aspects, *interest*, *body*, and *objects*."] **W. T. Bush.** 'The Existential Universe of Discourse.' ["While an existential problem may be an inquiry whether something exists, it can never be an inquiry whether the subject-matter of the discussion exists." This "existential universe of discourse grows" and contains a human factor which cannot be overlooked. "Whatever the 'real universe' has been about, the universe of discourse has not stood still through the interval from Thales to Kelvin. A more unsatisfactory exponent of eternal verities can hardly be imagined."] **J. M. Baldwin.** 'Motor Processes and Mental Unity.' [*Apropos* of Judd's article in vi., 4, claims to have been one of the first 'motor-men on the psychological electric-car'.] vi., 8. **G. A. Coe.** 'The Mystical as a Psychological Concept.' [It is "simply the automatic in general, interpreted as ontological immediacy": "there is no distinctive 'mystical experience'" and "mysticism is not to be identified with religion or with any part of it".] **F. H. Rousmanière.** 'The Bases for Generalisations in Scientific Methods.' [Discusses the question of how many particulars are required.] **D. S. Hill.** 'Reply to Prof. Frame.' [Calls his critic in v., 21 a skunk (in Latin).] Report of Section of Anthropology and Psychology of the New York Academy of Sciences.

Revue Néo-Scolastique. Février, 1909. **P. Richard.** 'Instrumental Causation according to St. Thomas.' **H. Hoffmans.** 'Sensibility according to Roger Bacon.' [Bacon marks three degrees of sensibility,—'pure sensation,' 'discernment,' 'rudimentary reasoning'. These three are found in infants and in brute animals, but not the power of abstraction.] **S. Deploige.** 'The Conflict of Moral Science with Sociology.' [Sociology is not really at issue except with Rousseau and with Cousin. Intellectual reign of Cousin and the Eclectics in France in the early nineteenth century. Eclecticism, a sort of undenominational religion.] **F. de Hovre.** 'Otto Willmann.' [The great Catholic German pædagogist. Education, according to him, is to bring out "the vocation of the individual to serve as a member of the great whole which God has built". He protests against the exclusive aim at individual perfection, which dominated the education of the eighteenth century.]

REVUE DE PHILOSOPHIE. 1er Mars, 1909. **F. Chovet.** 'First Principles, Their Origin and Objective Value.' [There are five first principles, of Identity, of Contradiction, of Reason, of Substance, of Causality, and they are not merely logical, but ontological.] **A. de Gomer.** 'Soul and Matter.' [A plea for a Permanent Self against Le Dantec, *L'Individualité et l'Erreur individualiste.*] **Dr. Goix.** 'The Psychology of a Saint's Fasting.' [A study of St. Rose of Lima.] **P. Duhem.** 'Absolute and Relative Motion.' [A fourteenth century Paris Doctor, John Buridan, on Place and Motion. "For local motion, he agrees with Duns Scotus against the Nominalists: he attributes this motion to a reality, purely successive, intrinsic to the thing moved. This doctrine, which assigns to local motion a character distinct from all other movements, is assuredly one of the profoundest, and, one may say, most prophetic of the views of the chief of the Paris School."] 1er Avril, 1909. **A. Farges.** 'Subject and Object in Perception.' [Insists on the Aristotelian principle that action and passion are one, with this difference only of thought between them, that as being from the agent it is called action, and as being in the patient it is called passion. Seems to be leading up to this argument, to come in a second article, that the passion, or impression, in the subject mind, being one with the action that is of the object, is a revelation of what is of that object, and, so far forth, of the object as it is in itself.] **A. Briot.** 'The Origins of Life.' [An adverse criticism of Charlton Bastian's *Evolution of Life.* Failure of the attempt to establish spontaneous generation against Pasteur.] **G. Dumesnil.** 'C. C. Charaux.' [Memoir of a laborious and well-loved Professor.] **P. Duhem.** 'Absolute and Relative Motion.' [Opinions of the School of Paris at the opening of the sixteenth century, reducible to three, that of the Realists, who took motion for a successive entity, distinct from the thing moved, inherent in that thing so long as the motion lasted; that of Gregory of Rimini, who identified motion with the space percurred; that of the Nominalists, who were said to identify motion with the body in motion. These strange speculations have some interest in an age which resolves qualities into vibrations, waves, or currents.] 1er Mai, 1909. **P. Duhem.** 'Absolute and Relative Motion.' [Conclusion of a series of Articles. "Physical theory conducts us to the threshold of a metaphysical affirmation, which we find almost impossible not to formulate;—relative movements, while alone verifiable by experiment in concrete nature, and alone open to cinematic representation, are not things primary and irreducible; they are results and consequences of absolute movements, which transcend all observation and all geometric representation."] **M. Gossard.** 'Divine Reality as it stands to Human Formula.' [Interesting in its bearing against Modernism.] **A. Farges.** 'Union of Subject and Object in the Perception of the External Senses.' ["The sense of outwardness, which we experience when an object strikes us, is explained quite naturally. If the patient receives really in himself the foreign action of the agent,"—action and passion being one, according to Aristotle,—"it is not surprising that he has a consciousness of seizing the non-ego in the ego. Thereupon, feeling in ourselves an action which does not belong to us, but to a foreign agent, it is quite natural for us to seek to project it outside in the direction from which it comes,—to restore it, so to speak, to its place at the exact distance that tactile experience has taught us."] **M. Baelen.** 'The Monist Mechanism of Taine.' [A psychological exposition of Taine's character.]

ARCHIVES DE PSYCHOLOGIE. Tome viii., No. 1. **E. Naville.** 'Hallucinations visuelles à l'état normal.' [Account of certain visual hallucinations experienced by the veteran philosopher, in his ninety-second

year, during a summer vacation spent at an altitude of some 800 m. above that of his usual residence.] **P. Bovet.** 'L'étude expérimentale du jugement et de la pensée.' [Critical account of the German work, from Marbe to Bühler, with illustrations from experiments performed by the writer. The method does not deserve Wundt's strictures; it has also improved from study to study. The results are of value not only to individual psychology but also to logic.] **G. Guidi.** 'Recherches expérimentales sur la suggestibilité.' [Experiments on the arousal, by suggestion, of a sensation of warmth in the finger; description of apparatus. The suggestibility of school-children decreases with age and education. There is an increase at eight-nine and at fourteen-fifteen due probably to the acceleration of growth at these periods, and in the latter case to the onset of puberty.] **T. Jonckheere.** 'Contribution à l'étude de la vocation. Devient-on instituteur par vocation?' [The writer chose the life of a normal school teacher largely because he anticipated short hours and long vacations. Inquiry among thirty-five of his students shows that all (there is a single doubtful exception) are preparing to teach, not from love of the vocation, but for reasons of family pressure, advice of friends, material advantages, etc.] **E. Anastay.** 'L'origine biologique du sommeil et de l'hypnose.' [Originally, there is no alternation of sleep and waking. With the establishment of day and night comes that of the waking and resting periods. The first sleep, of men and animals, is a normal hypnosis, characterised by catalepsy; a partial or one-sided wakefulness is still maintained, since prey must be captured if it appears, aggression must be repelled, accidents must be guarded against. In the weaker creatures, this normal catalepsy passes into lethargy and somnambulism. Civilisation has replaced the early cataleptic sleep by a more complete and deeper sleep, which we now term normal sleep; and the modern physician avails himself of the phenomena of hypnosis, guiding and emphasising, in the interests of science and health.] Recueil de faits: documents et discussions. **H. Zbinden.** 'La neurasthénie a-t-elle une origine psychique?' [The adherents of the two schools, the physiological and the psychological, are tending to common ground in the recognition of the predominance of mental phenomena in neurasthenic states.] **E. Claparède.** 'Défaut du "sens du retour" chez un chat.' [A favourite cat was unable to regain its home after having travelled only 350 m. The case is reported as a possibly valuable 'negative instance'.] **C. Werner.** 'IIIme réunion des philosophes de la Suisse romande, Rolle, 18 Juin, 1908.' La Société belge de Pédotechnie. 'L'école en plein air'; 'La vision chez les écoliers.' Bibliographie. Notes diverses. Tome viii., No. 2. **E. Ivanoff.** 'Recherches expérimentales sur le dessin des écoliers de la suisse romande: corrélation entre l'aptitude au dessin et les autres aptitudes.' [A study based upon questionary returns; 2,441 pupils sent in 9,764 drawings, which were accompanied by estimates of ability and character from their teachers. After discussing the method of statistical treatment, the author sets forth the correlations. He finds that in general school-work the girls are somewhat superior to the boys; for both sexes, aptitude for drawing is correlated with a high level of work. It is also correlated with good standing in writing, geography, history, manual training and French composition; the correlation with language (reading, grammar, etc.) is uncertain, and that with arithmetic is high for girls, practically zero for boys. Under the heading of intellectual and moral traits, drawing correlates with intelligence, attention, less strongly with temperamental activity, not at all with gentleness of disposition, with obedience in boys and apparently with disobedience in girls, with application (especially in girls), and with neatness (in boys). These correlations are of various numerical

degrees; and some are direct (the phenomena are related as cause and effect), some only indirect (the phenomena are related as joint effects of a single cause): thus, the correlation of drawing with intelligence, and perhaps with history, is indirect. These results are discussed from the psychological and educational standpoints; the article ends with plates of sample drawings.] **A. Castanié.** 'L'influence de la rééducation dans un cas grave de psychasthénie.' [Treatment of a case of severe psychasthenia by admission to family life under strict control; the patient was not cured, but became a passable and useful member of society.] **E. Thomas.** 'Psychasthénie et psychothérapie: observations et réflexions.' [A plea, reinforced by citation of cases, for the employment of psychotherapeutic methods by the general practitioner.] **T. Jonckheere.** 'Expériences sur l'influence du mode d'épellation dans la mémoire de l'orthographe.' [Four experiments were tried: the words were simply read aloud; read aloud with division into syllables; read and spelled, with syllabification; and read and spelled, letter by letter, with a brief pause after every syllable. The best results demand that the word be read aloud; then spelled aloud, letter by letter, without syllabification, but with the pause after the syllable (fourth method); and then written down.] **E. Naville.** 'Hallucinations visuelles à l'état normal, II.' [Continuation of account from preceding number; the hallucinations now present themselves at the lower geographical level of Geneva.] Bibliographie. Publications reçues. Notes diverses.

Zeitschrift f. Psychologie. Bd. xlix., Heft 6. **K. Groos.** 'Untersuchungen über den Aufbau der Systeme, I.' [An inquiry into the logical architecture of philosophical systems. This first instalment deals with the idea of antithesis, which appears (1), in heuristic context, in the opposition of starting-point and goal, in the palintropy of thought (from experience to hypothesis, and then back again to experience; from psychology to logic, and then back again to psychology), and in the categories; and (2) in systematic context, first of all in the primitive thought of mythology (heaven and earth, light and darkness, chaos and cosmos).] **G. Heymans** and **E. Wiersma.** 'Beiträge zur speziellen Psychologie auf Grund einer Massenuntersuchung. v. Eine Stichprobe: Geizige und Verschwender.' [In a recent volume of the *Revue philosophique*, de Fursac published an individual study of avarice. As the authors' questionary returns deal with the characteristics of the avaricious and spendthrift temperaments, a detailed comparison of results seemed methodically useful. There is agreement on all essential points; but the questionary method is both safer and wider than that of individual observation. The paper contains an analysis of the two temperaments in tabular form.] **A. Mueller.** 'Zur Geschichte und Theorie des Telegrammargumentes in der Lehre von der psychophysischen Wechselwirkung.' [Busse's well-known argument from the slightly different telegrams goes back to Erhardt and (in somewhat different form) to F. A. Lange. Ploucquet, however, has a similar argument, which may be generalised as follows. We have, in the borderland of physical and psychical, processes whose final (psychical) term may be functionally expressed by the equation $I = f(a, b)$, where I stands for idea, a for stimulus, and b for normal physiological processes. Experience shows that I may be a constant, while a and b vary. Since such a correlation is physically impossible, I cannot belong to a physical system; physical and psychical must therefore represent different orders of experience.] Literaturbericht. Bd. l., Heft 1 und 2. **R. Mueller-Freienfels.** 'Individuelle Verschiedenheiten in der Kunst.' [There would be less disputing about tastes if we took account of the mental constitution of the individual artist

or critic. Classification may be attempted from at least three points of view. (1) In terms of the preponderant department of sense or idea, we may distinguish the sensory-kinæsthetic, the sensory-auditory, the sensory-visual, the imaginative- (or better, reproductive-) kinæsthetic, the imaginative-auditory, the imaginative-visual, and the imaginative-verbal types. (2) In terms of affective reaction we find differences both in the position of the intensive limen, and in that of the indifference-point between pleasantness and unpleasantness. (3) In terms of general cultural attitude, we may distinguish the type that aims at depth of impression and accordingly clings to the familiar, and the type that craves variety and accordingly seeks novelty. Instances from music, poetry, painting, sculpture are offered under all three heads.] **A. Fischer.** 'Über Reproduzieren und Wiedererkennen bei Gedächtnisversuchen.' [An attempt, following Witasek, to define the parts played in memory by the reproductive and the recognitive dispositions (idea and judgment). Four specially directed experimental series give the following results: (1) In the initial stages of learning, the recognitive disposition develops very much more rapidly than the reproductive. On the other hand, the rise of the curve of recognition is checked much earlier, and its flattening is more pronounced. (2) The recognitive disposition dies away much more slowly than the reproductive. (3) The direction of attention to reproduction exerts an unfavourable influence upon recognition. (4) The place of a syllable in its series has no such influence upon recognition as it has upon reproduction.] **D. Katz** und **G. Revesz.** 'Experimentelle psychologische Untersuchungen mit Hühnern.' [Experiments on the memory and the visual sensations of the common fowl. (1) As regards memory the birds make a rather surprising showing. They learn readily, evincing a keen discrimination of form and direction. They are able, after some fifteen lessons, to pick out correctly every second or third grain of rice from a homogeneous series: the writers here institute an interesting comparison with the performance of the same task by young children. The laws of memory are evidently, in the large, identical with those found for human beings: within certain temporal limits, *e.g.*, distribution is more effective than cumulative repetition of lessons; after a considerable interval (four to six weeks) the particular task has to be relearned, but is relearned more quickly than it was originally learned; a new and partly learned activity will at first inhibit one that is older and more deeply impressed, but after a few hours gives way again to the older; and so on. (2) The birds, so far as tested, stand little, if at all, behind human beings in their discrimination of colours. They give clear evidence of the Purkinje phenomenon, which accordingly cannot be referred to the rods alone. They are subject to chromatic adaptation, though it appears that the contrast due to red and blue is stronger for their eyes than that due to yellow and green. They are not dazzled when transferred from dark to light: this is explained by their lack of the visual purple. Dark-adaptation is affected, as in our own case, by continued exposure to coloured lights.] Besprechung. [A. Messer on H. Maier's *Psychologie des emotionalen Denkens.*] Literaturbericht. Bd. 1., Heft 3 und 4. **S. Witasek.** 'Zur Lehre von der Lokalisation im Sehraum.' [Careful experiments, by the method of elimination, show that, in separate monocular function, corresponding points upon the two retinas are not correlated with subjectively identical points in the two visual fields; there is a discrepancy of monocular localisation, such that the right retinal point localises further to the left than its fellow, and conversely. This fact comes into conflict with the law that localisation, whether binocular or monocular, always follows the line of regard of the double eye. It is therefore ne-

cessary to repeat Hering's experiment (apparent shift of nearer of two points with shift of monocular fixation); and repetition, under conditions of extreme care and practice, shows that Hering's observation was mistaken; monocular localisation depends essentially only on the function of the single open eye. The author modifies in the light of these results the customary formulation of the law of identical visual directions; he refrains from theoretical discussion.] **L. Burmester.** 'Theorie der geometrisch-optischen Gestalttäuschungen, II.' [Continued from Bd. xlvi., 1906. Detailed report of observations with folded sheet of cardboard, cube, double-cube, stair-figure, and plaster intaglios; experiments with inverting instruments (lens, telescope, microscope) and stereoscope; deduction of fundamental relations. Historical survey and bibliography.] **A. Pick.** 'Zur Pathologie des Selbstbewusstseins.' [Report of cases of depersonalisation. Three mental factors may be made responsible; so that we have a sensational, an intellectual and an emotional theory of the phenomenon. The right theory, however, must be eclectic. In particular, the writer maintains, as against Oesterreich, that serious sensory disturbances may be present, although our present instruments and methods are not adequate to their full detection; and argues against Loewy that lack of the feelings of activity is not the exclusive cause of the disorder.] Literaturbericht. Bd. I., Heft 5. **H. Berger.** 'Über periodische Schwankungen in der Schnelligkeit der Aufeinanderfolge willkürlicher Bewegungen.' [Experiments made to determine the quickest rate of voluntary movement (winking, movement of finger) show that under certain conditions (absence of concomitant movements, early stage of practice) the intervals between movements evince a marked periodicity; every three to six sec. there appears a minimal interval, indicating an optimum of functional capacity. The phenomenon is probably cortical, and may be brought into line with Mosso's periodicity of fatigue in the nerve cell, Wundt's apperception waves, and certain observations of von Voss and Stern. The ultimate physiological ground is probably to be sought in the vascular waves of the pial arteries.] **M. Lobsien.** 'Über Schätzung kurzer Zeiträume durch Schulkinder.' [Class and individual experiments upon boys of twelve to thirteen, to determine accuracy of direct and indirect estimation (estimate in seconds and reproduction by finger-movement) of times of 2, 5 and 10 sec., with and without distraction. The times were both empty (limited by auditory, visual and tactual impressions) and filled (auditory). (1) Direct estimation gives an over, indirect and underestimation of the times. The reason is that, in the former case, judgment is passed simultaneously, in the latter discursively: this means a different attitude of attention and a different course of feeling. Since indirect estimation involves finger-movement, natural rhythm may possibly play a part: special experiments show, however, that the influence must be minimal. (2) In indirect estimation the shorter times are the more accurately judged; the reverse holds of direct estimation. The shorter the time, the less is the obscuration of it in memory (indirect): the longer the time, the greater is the effort of attention and the stronger the feeling of strain (direct). (3) Point-intervals are more accurately estimated than filled intervals in direct, less accurately in indirect estimation. This result is due, in part, to the illusion of brevity of a richly-filled time; the details, however, can hardly be satisfactorily explained. (4) Variously limited times are variously estimated: this is due in part to the genetic function of the different senses in the formation of the idea of time, in part to individual differences. (5) Distraction has no uniform effect: this is due to individual differences, especially of energy of attention.] Literaturbericht. **E. Becher.** 'Erwiderung auf Dürrs Besprechung meiner Schrift: Die

Grundfrage der Ethik (Bd. I., Heft 3 und 4 dieser *Zeitschrift*).' **E. Dürr.** 'Antwort auf vorstehende Erwiderung Erich Bechers.' Bd. I., Heft 6. **A. Pick.** 'Das pathologische Plagiat, eine Form von Störung der Erinnerung.' [Some years ago, a well-known dramatic critic was found to have plagiarised, almost word for word, the work of a colleague. Popular condemnation was strong; but the very grossness of the case suggests a pathological condition of the function of memory. The author shows that pathological plagiarism is a fact, documented by many literary evidences; that it depends upon intellectual and emotional factors; and that it is related to such other abnormalities of memory as cryptomnesia and paramnesia.] **O. Braun.** 'Eduard *v.* Hartmanns Psychologie.' [An account of Hartmann's psychological system, based chiefly on the *Grundriss der Psychologie*. Psychology is, for Hartmann, simply a series of inductions, leading the investigator to his metaphysical principles. A purely descriptive psychology, a psychology of consciousness, breaks down. So we must have recourse to hypothesis. We may appeal to the sub-conscious: but that road leads us only to the cell-consciousness, with our original problem unsolved. We may appeal to the extra-conscious, the physiological; but that leads to solipsism and materialism. Finally, we may appeal to the ultra-conscious, the unconscious-psychical. This, as furnishing a connecting link between the physiological or material, on the one hand, and the conscious-psychical (including the subconscious) on the other, satisfactorily rounds off our psychology: psychical phenomena and their physical correlates are both alike dependent on the unconscious. The main faults of this construction are its lapses from the inductive method, its too ready recourse to the unconscious, and its underestimation of the possibilities of a descriptive psychology.] **A. Minor.** 'Über die Gefälligkeit der Sättigungsstufen der Farben: eine experimentelle Untersuchung.' [Affective judgments on large coloured surfaces (the projection lantern was employed) by Major's method of single judgments combined with Cohn's plan of mixed series; degrees of chroma were obtained by the admixture of grey of the same tint as the colour; emphasis was laid on the introspective reports. Aside from special preferences and antipathies, the influence of association, and the effect of the mood of the moment, the rule holds (Cohn) that the more saturated colours are preferred.] Literaturbericht.

Zeitschrift für Philosophie und philosophische Kritik. Bd. cxxxiv., Heft 1, 1909. **Arthur Drews.** 'Das Unbewusste in der modernen Psychologie.' [According to Prof. Drews his master, Ed. von Hartmann's work on *Moderne Psychologie* (1901) amounted to an annihilating criticism of what had been done in that field by German philosophy during the last preceding generation. But his elaborate exposure was met by a conspiracy of silence. A recent writer, Richard Herbetz, does indeed recognise Hartmann's existence, but betrays a lamentable ignorance of what was meant by his doctrine of the Unconscious, to the elucidation and defence of which this paper is accordingly devoted.] **L. Kessler-Salem.** 'Symbolische Einfühlung.' ['Einfühlung,' in which contemporary German thought finds the key to æsthetic emotion, means the sympathetic identification of ourselves with the inner life of external objects. This paper is an attempt to extend Einfühlung from the æsthetic to the religious interpretation of nature, apparently in adhesion to the philosophy of Berkeley, which, the writer observes, is 'celebrating in our day a tardy triumph'. By a further generalisation the same process is so interpreted as to cover the Christian doctrine of the resurrection, which is carefully distinguished from animistic superstition and explained, as would seem, in a purely ideal sense.] **Dr. Kurt Geissler.**

'Der Zusammenhalt der Seeleneinheit mit dem Problem der Fortpflanzung, des Todes, der Soziologischen Gemeinschaft und des Soziologischen Fortschrittes.' [A long, discursive and somewhat inconclusive paper, in which geometrical analogies are freely applied to the solution of certain theoretical and practical antinomies.] **Dr. Schwartzkopff.** 'Ist die Seele eine Substanz?' [An attempt to prove, as against Paulsen, that the interpretation of self-consciousness in terms of mere psychic relationship can only be worked by the surreptitious assumption of a substantial soul at every step.] **Dr. O. Brann.** 'Euckens dramatische Lebensphilosophie.' [By the account of it given here Eucken's philosophy would be more appropriately characterised as epic than as dramatic. It represents human life and history, on the progressive side, as a continuous struggle to ascend from the world of nature to an ideal sphere where intellectual, æsthetic, and above all ethical interests are to have the fullest scope. Brann leaves Eucken's attitude towards religion rather vague; and a subsequent review of the Jena professor's last book by Dr. Schwartzkopff, writing from the German orthodox point of view, evidently desiderates a more definitely theistic colour in his system.] Rezensionen, etc. Bd. cxxxiv., Heft 2, 1909. **Alois Müller.** 'Über die Möglichkeit einer durch psychische Kräfte bewirkten Änderung der Energievertheilung in einem geschlossenen System.' [A critical examination of the hypotheses put forward by Becher and Ed. von Hartmann leads to the conclusion that 'a change in the distribution of energy within a closed system by psychical forces has not been proved; nor does it seem possible to prove it, because such a change either contradicts facts or physical laws or principles'.] **Johannes Schubert.** 'Hegels Gottesbegriff.' [The recently published theological essays of Hegel's youth are thoroughly anti-supernaturalist; nor does his nominal adhesion to the religious interpretation put on his philosophy by an orthodox disciple avail to weaken the overwhelming probability that his opinions remained unaltered through life.] **Alfred Wenzel.** 'Zur Textkritik von Spinozas Tractatus de Intellectus Emendatione.' [Endeavours to show that an imperfect understanding of Spinoza's metaphysics and epistemology on the part of certain critics is responsible for their mistranslations and gratuitous emendations of his text.] **Richard Kroner.** 'Über logische und asthetische Allgemeingültigkeit.' [Kroner disputes the fundamental idea of Husserl's philosophy, which is that 'the objective world is that which can be adequately apprehended by all subjects in the same way, the subjective side being the images formed of it by each individual'. This interpretation, according to him, has been superseded by Rickert's demonstration that the object of cognition is a transcendent obligation. 'Truth is what *ought* to be thought or recognised, or, in other words, what is affirmed by an imaginary ideal subject—a subject that only forms such judgments as ought to be formed.' But as by general admission we ought to believe what is true, this definition does not seem to get us any forwarder. And Kroner's extension of the same method to æsthetics in the sense of postulating a transcendent obligation to consider some things beautiful and others not, seems, so far, an unpromising substitute for the psychological analysis of Lipps. The subject is to be continued in a future number.] Rezensionen, etc.

Archiv f. d. gesamte Psychologie. Bd. xiii., Heft 3. **M. Scheinert.** 'Wilhelm von Humboldts Sprachphilosophie.' [The study falls into two parts: a chapter on Humboldt's views regarding the philosophy of language, which summarises his teaching under sixteen headings; and a chapter on the principles and method of his various investigations. His fundamental concepts are derived largely from Kant, in less degree

from Schiller and Fichte. He has a keen and self-conscious sense for facts; but he proceeds at once from fact to the highest problems of æsthetics, philosophy of history and metaphysics; he lacks the necessary middle term, a psychology. His method is thus curiously double-faced, and never rises above the heuristic level. There are very few of his results that we can take over. On the other hand, he is seldom demonstrably wrong; and he gave the impulse to a large number of still incompleted researches.] **E. Koch.** 'Über die Geschwindigkeit der Augenbewegungen.' [Review of previous work, and new experiments. Velocity is not directly proportional to excursion; with small angles it amounts roughly to 100-200°, with large to 200-500°. The movement shows three phases; maximal velocity usually occurs in the middle phase. Velocity may differ widely for the same observer and the same excursion. The slow rate of short movements is due to the constraint exercised, during the movement, by gradual adjustment to the terminus; rate may also be slowed by purely physiological factors. The instruction to move 'as quickly as possible' may even-up the phase-velocities, but does not increase rate. There is no physiologically preferred direction of movement. Co-ordination is defective. Movements of convergence are much slower than movements in the same direction; the impulse to movement differs in the two cases. The pauses vary, with circumstances, between 200 and 500 σ.] **Dr. Welcke.** 'Einheit und Einheitlichkeit.' [Polemic against Lipps, especially in regard to musical æsthetics. There is a unity of object as well as a unity of intention or meaning; and this unity is directly apprehended by a non-sensory or extra-sensory perception. Empirical unity differs from unitariness, which depends upon the orderly articulation of a whole; the principle of unitariness is the ideal contents which the whole adequately embodies or expresses in its structure, the 'architectural plan' or 'formative thought'. The 'fitting together' of the parts of a unitary whole is a complementary relation of these parts to one another with regard to a determinate whole; it depends upon the capacity of every part to assume a function that makes for unitariness; its direct apprehension or perception is based on the fact that order or arrangement, wherever found, appears as intrinsically valuable.] Literaturbericht. Bd. xiii., Heft 4. **F. E. O. Schultze.** 'Beitrag zur Psychologie des Zeitbewusstseins.' [The impression made by two successive stimuli, auditory, visual or tactual, varies with the rate of succession. At the one extreme lies (1) fusion, the impression of a single stimulus. (2) Next comes the trill, in which the interval between the stimuli is filled; the experience has no temporal extension, but is given in a mental present. In audition, the trill ranges to 60 or 100 σ. (3) In the collective impression (which in audition ranges to 350 or 400 σ), the stimuli are separate, but have attaching to them a certain *plus* of connexion (*Zusammengehörigkeit*). This *plus* which may be either *Wirkungsakzent* or awareness (*Bewusstheit*), does not necessarily involve the persistence in 'echo,' of the first stimulus. Visual impressions show but slight collectivity. (4) Subjective unitariness (ranging to 880 σ) is also effected by a *plus* of connexion, but this is now dependent on organic sensations; sounds and organic sensations form an unity, which may be evoked at will or may crop up of itself. (5) Beyond unitariness lies complete and separate independence of the stimuli. Types (3) and (4) are of especial importance for the analysis of rhythm. The length of a 'wave of attention' is difficult to determine; it extends, perhaps, from 400 to 900 σ. The 'range of consciousness' for auditory impressions of moderate intensity (total time of presence in consciousness) is, perhaps, from 300 to 500 σ. Temporal extension is an irreducible attribute of mental phenomena. There are temporal formations (*e.g.*, the pause) which lack

phenomenal character, and yet are definite in extent and functionally efficient.] **A. Kirschmann.** 'Über die Erkennbarkeit geometrischer Figuren und Schriftzeichen im indirekten Sehen.' [(1) Experiments on the range of indirect vision (horizontal meridian of right eye) for geometrical figures, angular and curved, open and filled, white on black and black on white. Angular figures are the more readily cognised; acute angles favour cognition of form; symmetry is of importance only as circular symmetry; white on black is better than the opposite arrangement. (2) Experiments on letters (lapidary lettering). Comparison of right and left eyes; of temporal and nasal halves of the horizontal meridian; of right and left halves of the field of vision: serial order of letters: superiority of white on black, and its practical consequences. (3) Experiments on syllables and three-letter words (same lettering). General evaluation of the results for a psychology of reading.] Literaturbericht. **R. A. Pfeifer.** 'Literaturbericht aus dem Jahre 1907 über das Gebiet der optischen Raumwahrnehmung.'

Rivista Filosofica. Anno x., vol. xi., Fasc. v., November-December, 1908. **B. Varisco.** 'L'esperienza mentale.' [The objects of geometry have a real existence outside ourselves, no less than the objects of physics. They are the lines and figures with which space is peopled. But while physical experiments deal with objects that move and change, the objects of geometry remain eternally fixed; thus in geometrical experiments it is the knowing mind that moves and changes, its so-called operations and constructions being in truth a turning of the attention to lines and figures that were not before observed.] **A. Levi.** 'Il fenomenismo neo criticista di Charles Renouvier.' [The first part of an analysis of Renouvier's philosophy, terminating at the moment where the French metaphysician after starting with the category of relation as the most general description of our actual experience, carries thought up to the category of consciousness as the *locus* of all possible experience.] **A. Faggi.** 'Plotino e Schopenhauer.' [While severely condemning Plotinus as a writer, Schopenhauer credits him as a thinker with having anticipated Kant's doctrine of the subjectivity of time. This, however, is a mistake, for it is in the world-soul not in the human or individual soul that Plotinus places the origin of time. On the other hand Plotinus has really anticipated Schopenhauer's own doctrine that in time itself only the present moment exists.] **D. Rodari.** 'Gian Giacomo Burlamacchi e G. G. Rousseau.' [An attempt to show that the leading ideas of the *Contrat Social* as well as of Rousseau's earlier essays were borrowed from the writings of Burlamacchi, a Genevese of Italian descent, who taught constitutional law at Geneva in the earlier eighteenth century. It is to be hoped that in the sequel to this study Rodari will consider the possibility that Rousseau and Burlamacchi took their ideas independently from Hobbes, Locke, and the Greek physiocrats.] **G. Vidari.** 'La morale razionalista.' [Without denying that on particular occasions the right course is discerned by intuition and adopted under the impulse of feeling as distinct from reason, the recognition of justice as a universally binding law must be claimed for the province of reason. More than this, according to Leclère, a French spiritualistic philosopher with whom Prof. Vidari seems to agree, the Good is identified with the essence of existence, a principle from which God, freedom, and immortality are easily deduced.]

Rivista di Filosofia. Anno i., No. 1. January-February, 1909. [The first number of a new review, described on its cover as the organ of the 'Società Filosofica Italiana'. It has been formed by the coalescence

of the 'Rivista Filosofica,' a summary of which has for several years past been given in MIND, with the 'Rivista di Filosofia e Scienze Affini,' edited by Prof. Marchesini, and representing the views of the Italian Positivist school founded by Prof. Roberto Ardigò of Padua. The new review is conducted by a strong editorial committee, and will issue five numbers annually, the subscription price for which is 10 lire for Italy and 12 lire for other countries.] **Roberto Ardigò.** 'Infinito e Indefinito.' [Every concrete *datum* is finite, whether it be a number, or a line, or a compound of co-existing parts, or a process continuing in time, or an inextended quantity of energy, or the property of a substance, or a spiritual faculty. And to any of these concrete realities infinity can only be attributed in a negative or indefinite sense; that is to say we can conceive them as susceptible of increase or division, or diminution without end; we cannot conceive, without a contradiction, of anything as being infinite in itself. Thus, according to Ardigò, theism and pantheism alike assume the absurdity of a completed infinite, and moreover the additional absurdity of an infinite which allows finite beings to exist outside itself.] **Michele Losacco.** 'Di un' opinione sull' origine della filosofia naturale.' [An adverse criticism, based on historical facts, of Joël's theory that natural philosophy has been evolved out of mysticism.] **P. R. Trojano.** 'Ateologia, teleologia, ed umanismo nell' etica Aristotelica.' ['For Aristotle morality is independent of any divine origin, protection, or sanction; it is essentially atheological and extra-religious.'] **Antonio Falchi.** 'A proposito di un libro sulle dottrine teocratiche.' [A rather intemperate polemic of no general interest.] **Bernardino Varisco.** 'Fra Kant e Rosmini.' [Working on Kantian lines Rosmini hoped to escape from the sceptical consequences of Kant's subjective method by postulating an intuition of Being, understood in the most general sense, as something common to subjective and objective experience. But he did not logically establish the fundamental identity of Being, whether in the mind or out of it. To have done so might have committed him to pantheism. Nevertheless, his philosophy suggests a method by which on the principles either of Aristotle's or of Hegel's logic, subjective Being is shown to be unthinkable without an objective counterpart.] **Giovanni Marchesini.** 'Il concetto empirico e ideale di "Educazione".' [The object of education is not to prepare the pupil for the fulfilment of any destiny or end or ideal; it consists in turning aptitudes into abilities by the instrumentality of habits. And this applies to the acquisition of knowledge no less than to the acquisition of practical arts.] **Roberto Ardigò.** 'Altre liriche del "Buch der Lieder" di E. Heine.' [Metrical translations from Heine.] **Biagio Brugi.** 'Natura e diritto.' [A courteous but severe criticism from the positivist point of view of the theory of natural rights recently advocated by Prof. G. Del Vecchio.] Questioni Varie, etc.

X.—NOTE.

The following gentlemen have joined the MIND Association since the printing of the April number:—

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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—COHERENCE AND CONTRADICTION.[1]

By F. H. Bradley.

In the preceding article I pointed out how coherence and comprehensiveness are the two aspects of system, and I attempted to justify the claim of system as an arbiter of fact. In what follows here I am to endeavour to show how system stands to contradiction. The question is difficult and could in any case here be dealt with but imperfectly, and the reader again must excuse me if I approach it by a circuitous route.

What in the end is the criterion? The criterion of truth, I should say, as of everything else is in the end the satisfaction of a want of our nature. To get away from this test, or to pass beyond it, in the end, I should say, is impossible. But, if so (the suggestion is a natural one), why should we not set forth, or try to set forth, the satisfaction of our nature from all sides, and then accept and affirm this statement as truth and reality? That in practical life we should do this, at least in some sense, I am fully agreed. But I cannot on the other hand endorse generally such an answer in philosophy, for I am unable to see how by such a plan we avoid theoretical shipwreck.

Truth to my mind is a satisfaction of a special kind, and, again, it is a satisfaction which, at least at first sight, is able to oppose itself to others. But, however that may be, truth seems to differentiate itself clearly from other satisfactions.

[1] Another article, on Appearance, Error and Contradiction, is to follow.

And philosophy, I at least understand, is to meet specially this special need and want of truth. To say that philosophy's mission is to find ideas which satisfy all sides of my being, and that the truth of these ideas does not otherwise matter, remains to my mind untenable. Ideas which are inconsistent, chaotic and discordant must, I think, by philosophy in the end be rejected as false. The doctrine that there is no truth in the end but the general working of ideas, whatever is otherwise the character of these ideas, is, or may be, acceptable, I once more agree, as a practical creed. But on the other side, with such a doctrine, it seems to me, there is an end of philosophy (*cf.* MIND, No. 66, pp. 229-230).

To philosophise at once with all sides of my nature is, if you will, what I desire. But I at least do not perceive how I am to go about to accomplish this feat. If you agree with me that truth is special, then I am at a loss to see how to aim at it, or to find it, or to verify its presence, by some general movement of my being. On the other hand, to produce ideas at the dictation of all my particular wants is a thing which certainly I understand. But to maintain that, whatever the intellect may say or feel about these ideas, they are all none the less true, is to me ruinous theoretically. It seems the sheer denial in the end of intellectual satisfaction and truth. There is to be, in other words, no more philosophy except in the sense of a collection of useful ideas. The value of such a collection I do not seek to disparage, though the value disappears, I would insist, so far as the collection is onesided. Still, if philosophy has to end here, there is, I would repeat, in the proper sense to be no more philosophy.

Hence I have to remain so far in my old position.[1] If there is to be philosophy its proper business is to satisfy the intellect, and the other sides of our nature have, if so, no right to speak directly. They must make their appeal not only to, but also through, the intelligence. In life it is otherwise, but there is a difference between philosophy and life. And in philosophy my need for beauty and for practical goodness may have a voice, but, for all that, they have not a vote. They cannot address the intellect and insist, "We are not satisfied, and therefore you also shall not be satisfied". They must be content to ask and to repeat, "Are you in fact satisfied with yourself as long as we remain unsatisfied? It is for you to decide, and we can only suggest." Hence, I conclude, I can philosophise with my whole nature, but I cannot do this directly. On one hand the appeal is to the

[1] *Appearance*, chap. xiv.

intellect, but on the other hand every aspect of my being can and does express itself intellectually. And the question is how far, in order to reach its special end which is truth, the intelligence has to adopt as true the various suggestions which are offered. How far, in order to satisfy itself, must its ideas satisfy all our needs?

In the above I am of course not assuming that the intellect is something apart, working by itself, and, so to speak, shut up in a separate room. On the contrary those who teach the implication of all sides of our being with and in what we call thought, deny no doctrine held by me. All that I maintain is that we have a specific function, as such verifiable in fact, and claiming to possess special rights of its own. I insist that, unless we take that claim seriously, speculation is impossible. And, if any one differs from me here, I would go on to urge that he is in conflict with fact, and rests on inconsistency. And the result, I think, is confusion or total obscurity.

I retain therefore, on the whole (if I may repeat this), my former position. All that I would modify is the importance, perhaps one-sided, which was given to pain, and the emphasis on the special doubt which arose here from our ignorance.[1] I would not withdraw what I said as mistaken, but I would certainly prefer now to state the case otherwise. The better way, I think, is to point out that all sides of our nature press for satisfaction, and, if left unsatisfied, will manifest themselves so in idea. We cannot, I think, reasonably suppose an aspect of our being left somewhere outside and able to say nothing directly or indirectly. That this is not possible, we could hardly prove, but its probability seems really trifling. Every element of my nature then will find a voice. Every side of my being will represent itself as satisfied in idea and in reality, if not in what we call fact. And influenced, as we must be, by these claims within us and before us, we undoubtedly in a sense philosophise with the whole of our nature. But from this I still see no short cut to the conclusion that any need of our nature satisfied in idea is truth. The way of logical proof to my mind must on the contrary be indirect. Suppose, that is, the intellect completely satisfied and truth really attained, can you have with this the idea or ideas of other needs unfulfilled? These ideas, if so, will be there, and they will not be true, but, at least apparently, in conflict with the truth. For to admit them as necessary and as good, certainly does not in itself seem to make them true. And the real issue is whether, if

[1] *Appearance*, chap. xix. and pp. 609-612.

left outside and not included in the truth, these ideas do not make truth imperfect in itself. The intellect has to satisfy its own requirements, and the question is whether, if the above ideas are not included but somehow conflict, those requirements are satisfied. And the further question is whether the ideas can possibly be included without being taken as true.

It is obviously necessary therefore to inquire what does or would satisfy the intellect. Such an inquiry I am not undertaking in this article, but I may state the view which has commended itself to my mind.[1] Truth is an ideal expression of the Universe at once coherent and comprehensive. It must not conflict with itself and there must be no suggestion which fails to fall inside it. Perfect truth in short must realise the idea of a systematic whole. And such a whole, we saw (MIND, No. 71), possessed essentially the two characters of coherence and comprehensiveness. I will therefore, without pausing here to raise and discuss difficulties, go on at once to ask as to the connexion between these two characters. Have we in comprehensiveness and coherence two irreducible principles or have we two aspects of one principle ?

If we can adopt a well-known view the answer is plain. The whole reality is so immanent and so active in every partial element, that you have only to make an object of anything short of the whole, in order to see this object pass beyond itself. The object visibly contradicts itself and goes on to include its complementary opposite in a wider unity. And this process repeats itself as long as and wherever the whole fails to express itself entirely in the object. Hence the two principles of coherence and comprehensiveness are one. And not only are they one but they include also the principle of non-contradiction. The order to express yourself in such a way as to avoid visible contradiction, may be said in the end to contain the whole criterion.

No one who has not seen this view at work, and seen it applied to a wide area of fact, can realise its practical efficiency. But, for myself, if this solution of our puzzle ever satisfied me entirely, there came a time when it ceased to satisfy. And when attempting to discuss first principles this was not the answer which I offered.[2] However im-

[1] *Appearance*. *Cf.* MIND, N.S., No. 62.

[2] *Appearance*, 1893. I have perhaps fallen in places into inconsistency, but there was, I think, no doubt in my mind as to which of the two answers was the right one. There is however a natural tendency to pass from *really* to *visibly*, and this tendency may perhaps at times have asserted itself unconsciously.

manent in each element the whole is really, I cannot persuade myself that everywhere in the above way it is immanent visibly. I cannot perceive that everywhere with each partial object we can verify the internal contradiction, and a passage made thus to a wider unity of complementary opposites. And, this being so, the question as to our two principles of coherence and comprehensiveness requires, so far as I am concerned, a modified answer.

To a large extent partial objects are seen (I at least cannot doubt this) to develop themselves beyond themselves indefinitely by internal discrepancy. Everything, so far as it is temporal or spatial, does, I should say, thus visibly transcend itself, though, if there are many orders of time and space, the same self-transcendence will not hold between them. But I will not seek here to urge a principle as far as it will go, when I admit that, so far as I can see, it will not go to the end. The visible internal self-transcendence of every object is a thing which, as I have said, I cannot everywhere verify.

And the principle which in my book I used and stated was the following. Everything which appears must be predicated of Reality, but it must not be predicated in such a way as to make Reality contradict itself.[1] I adhere to this principle, and I will go on briefly to justify it with special reference to what we have called comprehensiveness and coherence. There are two main questions, I think, to which answers here are wanted. (1) If my object is really defective, and if it cannot develop itself for me beyond itself by internal contradiction, how otherwise can it do this? (2) How and in what sense does an isolated object make Reality contradict itself?

(1) The object before me is not the whole of Reality, nor is it the whole of what I experience. The Universe (I must assume this here) is one with my mind, and not only is this so, but the Universe is actually now experienced by me as beyond the object. For, beside being an object, the world is actually felt, not merely in its general character but more or less also in special detail.[2] Hence, as against this fuller content present in feeling, the object before me can be experienced as defective. There is an unspecified sense of something beyond, or there may even arise the suggestion in idea of the special complement required. We may perhaps

[1] This is of course not the same thing as taking up a suggestion (whatever it may be), and then, if you fail to see that it is visibly inconsistent, forthwith calling it real.

[2] The reader is referred here specially to MIND, No. 69.

hesitate to say that the defective object itself suggests its own completion, and we may doubt whether the process should be called Dialectic. But at any rate a process such as the above seems to furnish the solution of our problem. Exactly how that idea comes by which the partial object is made good, is, on the view we have just sketched, a matter of secondary moment. The important point is that with the object there is present something already beyond it, something that is capable both of demanding and of furnishing ideal suggestions, and of accepting or rejecting the suggestions made.[1]

On a view such as this the essential union of comprehensiveness with coherence seems once more tenable. We have not only connexions in the object-world, temporal, spatial and other relations, which extend for us the content of a partial object. We have also another world at least to some extent actually experienced, a world the content of which is continuous with our object. And, where an element present in this world is wanting to our object, dissatisfaction may arise with an unending incompleteness and an endless effort at inclusion. The immanent Reality, both harmonious and all-comprehending, demands the union of both its characters in the object. The reader will notice that I assume here (*a*) that everything qualifies the one Reality, (*b*) that, when one element of the whole is made an object, this element may be supplemented even apart from visible inconsistency, and (*c*) that, to know Reality perfectly, you must know the whole of it, and that hence every partial object is imperfect. To this last point I shall return, but will proceed first to deal with the question asked as to Contradiction.

(2) "For," the reader may object, "suppose for the sake of argument that I admit the above, I still do not see how Contradiction comes in. Why am I to add with you that the test of truth is its ability to qualify Reality without self-contradiction?" In replying to this I will first dispose of a point which possibly is obvious. If, in speaking of Reality, you say 'R is *mere a*,' and if then, while you say that, another qualification, *b*, appears and is accepted, you contradict

[1] See further *Principles of Logic*, pp. 381-382, as well as the article just referred to. The reader should bear in mind that we may have (*a*) a detail or (*b*) a general character which is wanting in the object and which is actually felt by me. Beyond this there is the question whether content, not actually now felt by me, can be suggested by a reaction of the whole reality which is one with me. I am myself ready to accept even this further possibility, but I would urge on the reader the importance here of maintaining in any case the above distinctions.

yourself plainly. To this your answer, I presume, will be, "Yes, but I was careful *not* to say '*mere a*'. I merely said '*a*,' and between these two assertions is a vital difference." The question as to this vital difference may perhaps be called here the real issue. It is contended against me that I may first say '*Ra*' and then later '*Rb*' and then later '*Rc*' without any contradiction. For *a*, *b* and *c* may be separate, or, if related, they may be conjoined externally. Hence '*a* with *b*' (it is urged) is quite consistent with '*a*,' since '*a*' remains unaffected. It will hence be absurd to argue that by merely saying '*a*' the presence of '*b*' is denied.

My object here is to explain the sense of the doctrine which I advocate far more than to make this doctrine good against all possible competitors. And hence, if in what follows I seem to the reader to be assuming all that has to be proved, I must ask him to bear this warning in mind. Certainly I must assume here that the view of judgment which I hold is correct, and it is on this view that what follows is really founded. I have at least seen no other view of judgment which to myself seems tenable, but this is a point on which I cannot attempt to enter here. I assume then that in judgment ideas qualify Reality, and further that in judgment we have passed beyond the stage of mere perception or feeling. The form of qualification present in these cannot, as such, be utilised in judgment. And the question is whether in judgment we have any mode of qualification which is in the end consistent and tenable. I do not think that we have any.[1]

In all predication I assume that the ultimate subject is Reality, and that in saying '*Ra*' or '*Rb*' you qualify R by *a* or *b*. My contention is that, in saying '*Ra*,' you qualify R unconditionally by *a*, and that this amounts to saying '*mere a*'. For is there, I ask, any difference between R and *a*? Let us suppose first that there is no difference. If so, by saying first *Ra* and then *Rb* you contradict yourself flatly. For *a* and *b*, I presume, really are different, and

[1] What follows in the text may perhaps be summed up thus. In feeling (with which we start) we have an immediate union of one and many, where the whole immediately qualifies the parts and the parts the whole and one another. In judgment this immediate unity is broken up, and there is a demand for qualification otherwise. This "otherwise" involves distinction and a relational plurality; and that, because simple qualification is now impossible, entails mediation and conditions. And, because in judgment we cannot completely state the conditions, we are forced into an indefinite process of bringing in new material and new conditions. The end sought by judgment is a higher form of immediacy, which end however cannot be reached within judgment.

hence, unless R is different from *a* and *b*, what you (however unwillingly) have done is to identify *a* and *b* simply. But the simple identification of the diverse is precisely that which one means by contradiction.[1] If on the other hand, when I say R*a*, I suppose a difference between R and *a*, then once more I am threatened with contradiction, for I seem now to have simply qualified R by *a*, the two being diverse. The reader will recall that we are concerned here with judgment and not with mere feeling or perception. And the question to be answered is how in judgment we are to qualify one thing by another thing, the two things being different.

A natural answer is to deny that the judgments, R*a* and R*b*, are unconditional. That, it will be urged, was never meant. But, if it is not meant, I ask, ought it to be said, except of course for convenience and by a licence? Let it then be understood that the above judgments hold good because R is somehow different from *a* and from *b*, and that the assertion is made under this condition, known or, I suppose, here unknown. The assertion then will really be '$R(x)a$' and '$R(x)b$,' the *x* being of course taken to qualify R. But, if so, apparently 'Ra' is true only because of something other than *a* which also is included in R. R is *a* only because R is beyond *a*, and so on indefinitely. Merely to say *a* is therefore, if our view of judgment is sound, equivalent to denying the above and to saying mere *a*; and that, since R is beyond mere *a*, seems inconsistent with itself. Contradiction therefore so far has appeared as the alternative to comprehensiveness, and the criterion so far seems to rest on a single principle.

If in other words you admit that the assertion 'Ra' is not true unless made under a condition, you admit that no knowledge in the form R*a* can be perfect. Perfect knowledge requires that the condition of the predicate be got within the subject, and, seeking to attain this end (which, I assume, can never be completely realised), we are driven to fill in conditions indefinitely. The attempt to deny this, so far as we have seen, seems to force you to the conclusion that *a* makes no difference to R and that *b* makes no difference to either. And, if so, upon our view of judgment you have said nothing, or else have fallen into self-contradiction.[2]

[1] For a discussion of the nature of contradiction the reader is referred to MIND, N.S., No. 20, reprinted in *Appearance* since 1897.

[2] I will remind the reader once more that the above argument assumes that in judgment what is asserted is taken to qualify Reality, and that there is no other way of asserting. To those who believe in another way

The general position here taken must, so far as I see, be attacked either by falling back on designation or by the acceptance of mere external relations. I will say something more on these alternatives lower down, but will for the present seek to explain further the view which I hold. Judgment on that view is the qualification of one and the same Reality by ideal content. And, if we keep to this, we must go on to deny independent pieces of knowledge and mere external relations. The whole question may, perhaps, be said to turn upon the meaning and value of the word "and". Upon the view which I advocate when you say "R is *a*, and R is *b*, and R is *c*," the "and" qualifies a higher reality which includes R*a* R*b* R*c* together with "and". It is only within this higher unity that "and" holds good, and the unity is more than mere "and". In other words the Universe is not a mere "together" or "and," nor can "and" in the end be taken absolutely. Relatively, that is, for limited purposes, we do and we must use mere "and" and mere external relations,[1] but these ideas become untenable when you make them absolute. And it would seem useless to reply that the ideas are ultimate. For the ideas, I presume, have a meaning, and the question is as to what becomes of that meaning when you try to make it more than relative, and whether in the end an absolute "and" is thinkable.

That on which my view rests is the immediate unity which comes in feeling,[2] and in a sense this unity is ultimate.

the above argument is not addressed. The same thing can again be put thus. The assertion of any object *a* is R*a*. Here, if R is not different from *a*, you have really no assertion. But, if R is different, you either deny this difference and so have a false assertion, or else you qualify R (that is, a higher R) both by *a* and this difference. Hence you have now asserted a manifold. But, as soon as you assert of R a manifold (however you have got it), there arises at once a question as to the "how". You cannot fall back on mere sense, because in judgment you are already beyond that; and on the other hand again you cannot simply identify. Hence you have to seek ideal conditions, and this search has to go on indefinitely. The above statement of course does not claim to show, how these special conditions which you want are supplied. The process, that is, so far does not point to the particular complement which is required. Again, the reader must not understand me to suggest that, given a single feeling or sensation, we could by any logical process pass beyond it. I am on the contrary assuming that at the stage of judgment we are beyond any single feeling or sensation, if ever we were confined to one.

[1] How the "and" is to stand to the external relations seems doubtful. If "and" itself is an external relation, then obviously, to unite it to its terms, you seem to want a further "and," and so on indefinitely.

[2] *Cf. Appearance*, p. 569, and MIND, No. 69. In my view (I am here of course in the main following Hegel) the "and" is a developed and

You have here a whole which at the same time is each and all of its parts, and you have parts each of which makes a difference to all the rest and to the whole. This unity is not ultimate if that means that we are not forced to transcend it. But it is ultimate in the sense that no relational thinking can reconstitute it, and again in the sense that in no relational thinking can we ever get free from the use of it. And an immediate unity of one and many at a higher remove is the ultimate goal of our knowledge and of every endeavour. The aspects of coherence and comprehensiveness are each a way in which this one principle appears and in which we seek further to realise it. And the idea of a whole something of this kind underlies our entire doctrine of judgment. You may seek, and I agree that it is natural to seek, for another view as to judgment and truth. But, so far as I see, that effort has resulted and will result in failure.

Judgment, on our view, transcends and must transcend that immediate unity of feeling upon which it cannot cease to depend. Judgment has to qualify the Real ideally. And the word "idea" means that the original unity has so far been broken. This is the fundamental inconsistency of judgment which remains to the end unremoved, and which in principle vitiates more or less all ideas and truth. For ideas cannot qualify reality as reality is qualified immediately in feeling, and yet judgment seeks in vain to escape from this foregone method. And thus, aiming to reconstitute with its ideas the concrete whole of one and many, it fails, and it sinks through default into the abstract identity of predicate with subject. But this is a result at which it did not aim and which it cannot accept as true. Judgment in the form 'Ra' never meant that between R and a there is no difference. What it meant was to predicate its idea of, and to reconstitute with its idea, the old immediate reality. But since that whole and its way of unity was not properly ideal, and since now we are in the world of truth and ideas, the judgment has failed to express itself. The reality as conditioned in feeling has been in principle abandoned, while other conditions have not been found; and hence the judgment has actually asserted unconditionally a of R and R of

yet degraded form of the immediate unity, and throughout implies that. Make the contents of the felt totality both objective and relational, and then abstract from any special character of the relations and any special character of the totality—and you have got what you mean by "and". But the point to be emphasised here is that, if you abstract *altogether* from the totality, you have destroyed your "and". The "and" depends essentially upon the felt totality, and of course cannot generate its own foundation.

a. And such an assertion, it perceives, is false. The way to remedy its falsehood is to seek the conditions, the new ideal conditions, under which 'Ra' is true. To gain truth the condition of the predicate must be stated ideally and must be included within the subject. This is the goal of ideal truth, a goal at which truth never arrives completely; and hence every truth, so long as this end is not attained, remains more or less untrue.

Every partial truth therefore is but partly true, and its opposite also has truth. This of course does not mean that any given truth is merely false, and, of course also, it does not mean that the opposite of any given truth is more true than itself. These are obvious, if natural, misunderstandings of our view. But surely it should be clear that you can both affirm and deny '$R(x)a$' so long as x remains unspecified. And the truth on one of these two sides surely becomes greater in comparison, according as on that side, whether of affirmation or denial, you are able to make the conditions more complete. But, as long as and so far as the conditions remain incomplete, the truth is nowhere absolute. "It is possible to produce sparks by striking flint" is, I understand, offered as an instance of unconditional truth.[1] But the opposite of this truth surely is also true. The thing clearly, I should have said, is possible or not possible according to the conditions, and the conditions are not sufficiently expressed in the judgment. You have therefore so far a truth which can at once be affirmed and denied, and how such a truth can be absolute I fail to perceive. The growth of knowledge consists (as we saw) in getting the conditions of the predicate into the subject. The more conditions you are able to include, the greater is the truth. But so long as anything remains outside, the judgment is imperfect and its opposite also is true. Certainly the truth of the opposite becomes progressively less, and may even be negligible, but on the other hand it never disappears into sheer and utter falsehood.

I cannot attempt to deal here with the alleged absolute judgments to be found, for instance, in arithmetic,[2] but I

[1] Prof. Stout in MIND, N.S., 65, p. 42.

[2] The question as to mathematical truth appears to be as follows: (i.) Are there really independent, self-consistent, self-contained principles from which the conclusions are developed, and (ii.) can these conclusions be developed without inconsistency? The second of these questions I am through ignorance of the subject unable to discuss. With regard to the first all I can do here is to remind the reader that there is an emphasis on "self-contained". Unless the whole process is completely intelligible

must touch on the claim of designation to offer logical truth.[1] I mean by designation the essential qualification of our meaning by pointing, or by the equivalent use of such terms as "this," "now," "here," or "my". That in fact we are forced to use designation and cannot in life possibly get on without it, I suppose, is obvious. We may set this much down, I presume, as universally accepted. And how far in our knowledge, if at all, we are able to get free from it, I do not propose here to discuss (MIND, N.S., No. 60, pp. 460-461). We have to deal here with designation merely in regard to its ultimate logical value.

At the entrance of philosophy there appears to be a point where the roads divide. By the one way you set out to seek truth in ideas, to find such an ideal expression of reality as satisfies in itself. And on this road you not only endeavour to say what you mean, but you are once for all and for ever condemned to mean what you say. Your judgments as to reality are here no less or more than what you have expressed in them, and no appeal to something else which you fail to make explicit is allowed. When, for example, you say "this," the question is not as to what you are sure is your meaning if only you could utter it. The question is as to what you have got, or can get, in an ideal form into your actual judgment. And, when you revolt against the conclusion that "this" appears to be a mere unspecified universal, when you insist that you know very well what "this" meant, and protest that your object was something other than such illogical trifling and child's play—our answer is obvious. What are you doing, we ask, with us here on this road? You were told plainly that on this road what is sought is ideas, and that nothing else here is current. You were warned that, if you enter here, you are committed to this principle. If you did not understand, whose is the fault? And as to your protests and "refutations" they may count elsewhere but they count for nothing with us. If you cannot show that on our own principle our conclusion is wrong,

per se, it depends on an unknown condition (however apparently constant) in my mind or elsewhere. "A is such that *b* is *c*" may (we have seen) be perfectly compatible with the statement that "A is such that *b* is not *c*". The question is whether the "such" is completely specified and got within the judgment itself.

[1] What Prof. Stout calls "implicit cognition" I take to fall under the head of designation. Otherwise the instance which he gives (on p. 44) is far from helping his case. For if the "I give you etc." is true, surely it is obvious that "I do *not* give you" *also* is true, so far at least as our knowledge goes. I understand Prof. Stout really here to rely on the "this," in other words on designation.

then for us you have said nothing. Our whole way doubtless may be a delusion, but, if you choose to take this way, your judgment means what ideally it contains; and, contrariwise, what you have not explicitly expressed and included in it is not reckoned. And, if so, no possible appeal to designation in the end is permitted. "This," "my," "now" and the rest will mean once for all exactly what they internally include and so express. Your meaning has always on demand to be made explicit and stated intelligibly within the judgment.

This I take to be the way of philosophy, of any philosophy which seeks to be consistent. It is not the way of life or of common knowledge, and to commit oneself to such a principle may be said to depend upon choice. The way of life starts from, and in the end it rests on dependence upon feeling, upon that which in the end cannot be stated intelligibly. And the way of any understanding of the world short of philosophy still rests on this basis. Such understanding may despise feeling, and may claim to have risen into a higher region, but in the end it will be inconsistent and be found to stand on that which, taken as truth, does not satisfy. Outside of philosophy there is no consistent course but to accept the unintelligible, and to use in its service whatever ideas seem, however inconsistently, to work best. And against this position, while it is true to itself, I have nothing to say; though I regret that to be true to itself is a thing so seldom within its power. For worse or for better the man who stands on particular feeling must remain outside of philosophy. If you are willing to be inconsistent (this is now an old story) you can never be refuted, and that is why philosophy can be said to depend upon choice. On the other hand the impulse to truth is strong, and the abnegation often too difficult, and the reason for this abnegation often, if not always, invisible without some training in philosophy. And hence the way of life, and of ordinary knowledge, obscurely conscious of its own imperfection, for ever seeks to complete itself by that which, if it aimed to be consistent, would be philosophy.

On the other side even within philosophy itself the counter tendency is irrepressible. Even if you harden your heart to accept the view that philosophy, as against life, is onesided, and has to remain mere understanding, yet, even with this, you may revolt against the rule of mere ideas. If we have certainty anywhere, this seems obvious, we have certainty in feeling. Whatever else may be doubted, at least we know what we feel. And that is why to some persons volition

appears specially to give indubitable fact, for volition obviously is felt. And it seems monstrous, when we seek for truth, to leave certainty behind. But what is often forgotten here is that the certainty belongs to feeling only as that is actually felt. To translate this certainty unmodified into ideas seems impossible; and how you are at once to transpose it into another mode and still use it as a test, I have failed to understand. And this is my position here against the use of designation as logical truth. I appreciate the certainty, the knowledge beyond all words and ideas, that may belong to "mine" and "this". I recognise that in life and in ordinary knowledge one can never wholly cease to rest on this ground. But how to take over into ultimate theory and to use there this certainty of feeling, *while still leaving that untransformed*, I myself do not know. I admit that philosophy, as I conceive it, is onesided. I understand the dislike of it and the despair of it while this its defect is not remedied. But to remedy the defect by importing bodily into philosophy the 'this' and 'mine,' as they are felt, to my mind brings destruction on the spot. To import them half-translated and ambiguously hybrid may give immediate relief but no less entails certain ruin. And my conclusion therefore is that at all costs consistency is better. If philosophy remains onesided that is perhaps after all a sign that it is following its own business. And, until better informed, that is all that I wish to say with regard to designation.

Apart from designation what remains as an alternative to the view which I advocate? The alternative, it seems to me, is to maintain a plurality of self-contained pieces of ideal knowledge. That course, even if we can regard the ultimate reality as being somehow a kind of passive but all-containing reservoir, leads in principle inevitably to Pluralism. And Pluralism, to be consistent, must, I presume, accept the reality of external relations. Relations external, not relatively and merely in regard to this or that mode of union, but external absolutely must be taken as real. To myself such relations remain unthinkable, and it would be natural for me to end this paper by enlarging on that head. But my chief difficulty here is that, perhaps from defective knowledge, I am not acquainted with any sufficient attempt to explain and justify the proposed alternative.[1] A scheme of

[1] Such a work we may, I hope, expect from Mr. Russell. I do not understand that at present he has offered any view which could fairly be taken as an account of first principles. In such an account obviously it would not be permissible to introduce ideas, ultimate or otherwise, with-

external relations in the first place is confronted by the apparent fact of feeling with its immediate unity of a non-relational manifold. To attempt to deny this fact, or again to leave it somewhere outside, seems ruinous; but how on the other hand it is to be included in the scheme I do not know. And the external relations themselves, if they are to be absolute, must, I suppose, be thinkable apart from any terms. Such a position, to my mind impossible in principle, seems, when you consider the variety and detail of the relations required, to be more than staggering. On the other side, if the relations apart from terms are not thinkable, obviously, I should have said, they have ceased therewith to be external absolutely. Your ultimate has now become a unity of terms and relations. And in any case, even if the relations are really external, there is the problem as to how somehow in fact we take them together with their terms. Further there is the difficulty caused by the fact of knowledge. If the world, as a whole, has the above character and also is so known, is the fact of our knowledge of the world's general character compatible with the fact of the world's being thus? Or, from the other side, if external relations were absolute, could we get to know that they were so except by a vicious argument? These are perhaps the main questions which press on any attempt to advocate external relations, and I do not know where these questions have been answered. External relations, if they are to be absolute, I in short cannot understand except as the supposed necessary alternative when internal relations are denied. But the whole "Either-or," between external and internal relations, to me seems unsound.

Philosophy perhaps may be called an attempt, possibly in the end an unsuccessful attempt, to escape from the fallacy of false alternative. To assume, if external relations are unthinkable, the possibility of a scheme of relations founded

out in each case discussing whether the ideas are consistent with all the rest which is accepted. In a subordinate subject one can of course start with a "save as hereinafter provided," and in this way preclude objections as to inconsistency. But in dealing with first principles such a course is clearly inadmissible. I am not however proposing here to criticise a doctrine which, I confess, I do not understand. And I trust I shall not be taken as disparaging the remarkable contribution which Mr. Russell, I am sure, has made to philosophy. The general tendency which he so ably represents has long been as good as unadvocated among us, and there has been, I agree, a very serious defect in the main body of our speculation. Whatever the result, Mr. Russell's inquiries should do a service to philosophy which, I imagine, it would not be easy to overestimate. On the inconsistency of some of the ideas used by him I hope to touch in a future article.

on and based in their terms, or again to pass from the rejection of internal relations as illusory to the acceptance of sheer externality, seem counterpart fallacies. The alternative in each case, if it is to stand, must justify itself independently. And in neither case to my mind is the justification likely to succeed. To myself it seems that ultimate reality is supra-relational. We find it first below relations, and again relations are necessary to its development, and yet the relations cannot rightly be predicated of the original unity. They remain in a sense contained in it, but none the less again they transcend it. And the natural conclusion in my judgment is to a higher unity which is supra-relational. In such a unity the imperfect relational scheme and the imperfect whole of feeling are both included and absorbed. And I have advocated this conclusion certainly not on the ground that it seems to explain everything, but because it appears to me to leave nothing really outside, while it loads us with nothing in the end worse than the inexplicable. My object, though I do not say that I never joined in aiming higher, is to be left with something which is positive and all-comprehending and not in principle unthinkable.

Criticism therefore which assumes me committed to the ultimate truth of internal relations, all or any of them, is based on a mistake. I cannot accept, for instance, the relation of subject and predicate as an adequate expression of reality. It evidently fails to carry over consistently into a higher region the felt sensible unity of the one and many. And there is no possible relational scheme which in my view in the end will be truth. The apprehended fact of terms in relation cannot itself, I am sure, be reconstituted ideally. In any mere relational synthesis there will be something left out, or else imported surreptitiously from elsewhere, and there will be ensuing inconsistencies which are rooted in and which point to incompleteness. I had long ago made it clear (so I thought) that for me no truth in the end was quite true, and I had myself (as I fancied) pointed out and dealt with the consequent dilemma. But it is in the nature of things, I presume, that there should always be some critics who know better.

The ideas, which we are compelled to use, are all in varying degrees imperfect, and certainly this is the case with internal relations. They seek to hold on to the initial felt fact of identity in difference, and they point to a higher consummation beyond themselves and beyond all relations. But, at least in the end, they cannot, I should say, be thought consistently. On the other side external relations, except

relatively and within certain limits, cannot in my opinion be accepted. They first of all seem to break wholly with the sensible fact, with that felt union of the diverse with which we begin External relations not only dissolve its immediate totality, but they appear to wish to leave its carcase lying, so to speak, somewhere unexplained outside of truth and reality. And, having destroyed the starting-place, they further cut us off in principle (so far as I see) from any advance to a higher unity. The totality they seem to offer (though I hardly know what this is, or indeed whether or how it is offered) does not satisfy our ultimate desire, and, themselves unthinkable, the construction they build seems joined by inconsistency. This, at least until better informed, is what I am forced to think of external relations if taken as absolute.

Amongst ideas which, though imperfect, must necessarily be used, I may mention here the ideas of identity and difference. Identity must not on the one side be confused with resemblance, nor again on the other side can it be taken as abstract. There is, for instance, in the end no such positive idea, at least to my mind, as mere numerical sameness or diversity. On either of the above alternatives (I do not offer to argue the point here) identity is destroyed. On the other hand, when you take it otherwise as one aspect of the concrete union of sameness and difference, identity, when you think it out, becomes inconsistent. It leads at either end to an infinite process, and the same again is the case with diversity. These ideas therefore cannot be ultimate, and we naturally desire to get beyond them to something wholly consistent. Yet, if we find we cannot do this, the ideas still must be accepted. They will remain the best means we possess of approximating to the truth, or of removing ourselves, if you prefer that, from the furthest extreme of error. They are not ultimately true, but they are truer far than what is offered in their stead.[1]

[1] The above was written in June, 1908, and since then Prof. James's *Pluralistic Universe* has appeared, containing some controversial references on the subject of identity. I have however left the text as it stood, and will merely add that I cannot accept Prof. James's account of the difference on this point between himself and me. My difficulty with Prof. James has been that from time to time I am led to suppose that he is advocating a view opposed radically to mine, and then later discover that he holds the very view which I have defended against him. And hence I am inclined to suspect that this may be the case elsewhere. Prof. James asserts, for instance, "external" relations as absolute; but I am forced to doubt whether he, any more than myself, believes in such things except as relative. And, while professing Pluralism, to myself Prof. James appears really to be a Monist, or, at most, a Dualist.

Coherence and comprehensiveness then we have found to be each an integral aspect of system. In practice they may diverge but they remain united in principle. And system is connected essentially with contradiction and its absence. For what is inconsistent is so far unreal, and a diversity, judged unconditionally to be real, we found was inconsistent, and such internal discrepancy tends to involve an indefinite passage beyond self. Further, apart from this, an object which is short of the whole tends naturally, we may say, to suggest its complement. And, since that suggested complement is absent in fact, reality thus contradicts itself. How the suggestion is made we have inquired. The object itself may through its own internal content pass for us visibly beyond its own limits, or, on the other hand, the addition may come to us from that whole which we feel. And this whole, as felt, may contain, we saw, actually a special detail, or again a general character which was wanting in the object; or the whole may be present to us even more vaguely as a something beyond, a something which is not satisfied with what is before us. But when the suggestion is made, however it is made, we have a fresh predicate of Reality. Our object has thus become more comprehensive, and we must endeavour now to include this fresh predicate within it consistently.

With the various questions which arise there is obviously here no space to deal. There is however one point on which I will venture to add a few words. The reader naturally may ask what on the whole the above conclusion is to mean. Does it mean that I am forthwith to set down everything that I want as real? The answer is, Not so, if by "everything" you understand "all that you want and exactly as you want it". We have been compelled to conclude to the actual satisfaction of all sides of our being, and hence doubtless everything that we need must be included in reality. But, this being agreed on, the question remains as to the sense of such inclusion. Now to say that such or such a detail cannot be left entirely outside is one thing, and it is another thing to insist that, when included, this detail maintains

Again, if there is any difference between the "pragmatic" doctrine of free will and that which I, for instance, have advocated since 1876, I cannot find in what it consists. And other examples could be given. Hence, things being thus between Prof. James and myself (though I admit that this may arise from my own failure to understand), it seems to me that explanation is wanted far more than controversy. Our differences may perhaps on the whole be small when compared with the extent of our agreement. But apart from further information it would be hardly in my power to form an opinion on this point.

untransformed its special character. The burden of proof in my opinion lies here with the assertor, and that burden is likely too often to strain or to overpass his power.

It is after all an enormous assumption that what satisfies us is real, and that the reality has got to satisfy us. It is an assumption tolerable, I think, only when we hold that the Universe is substantially one with each of us, and actually, as a whole, feels and wills and knows itself within us. For thus in our effort and our satisfaction it is the one Reality which is asserting itself, is coming to its own rights and pronouncing its own dissent or approval. And our confidence rests on the hope and the faith, that except as an expression, an actualisation, of the one Real, our personality has not counted, and has not gone here to distort and vitiate the conclusion. Hence our confidence is but the other side of our willingness, so far as is possible, to suppress irrelevancy and to subordinate self-will. And, wherever this is felt, there is little desire to insist that what we want must be real exactly so as we want it. Whatever detail is necessary to the Good we may assume must be included in reality, but it may be included there in a way which is beyond our knowledge and in a consummation too great for our understanding. On the other side, apart from the belief that the ultimate and absolute Real is actually present and working within us, what are we to think of the claim that reality is in the end that which satisfies one or more of us? It seems a lunatic dream from some cell the walls of which are like a bubble against the inroad of fact. The ideas and wishes of "fellows such as I crawling between heaven and earth" how much do they count in the march or the drift of the Universe?

One or more of us men—between these two things, so far as I see, there is little difference. We have heard, at least in this connexion, surely too much about the social nature of mankind and about the accumulated funds of humanity. Offered as an explanation of our confidence, wise or stupid, as an account, that is, of how it comes to exist, these considerations of course have their value. But offered as a justification, how can they be anything but worthless? We know how joint action with its fellows, and even that reduplicated sense of self which comes from the perception of its kind, gives assurance to the humblest. But we know again how this assurance can prove to be illusory. The gardener's spade and the unheeding footstep have long ago pointed the moral which at least to my mind has not somehow grown obsolete. Its force to my mind is not lessened by that vapouring, new or old, about Humanity, which, if it

were not ambiguous, would be scarcely sane. We have here to choose, I imagine, between two courses. We must either hold to a view of the criterion which succeeds in separating it from our demand for human satisfaction; or, if we cannot do this (as I cannot), we must once and for all abandon and reject any special prerogative for human beings. Where humanity stands in the scale of being we do not know, and it seems presumptuous to fancy that we ever can learn. And such knowledge for us, so far as we can see, would be useless. But the meanest creature has its absolute right.

> The spirit of the worm beneath the sod
> In love and worship blends itself with God.

And not only in love and worship does such union hold, but in will also and in the knowledge and enjoyment of beauty and truth. And, if we believe this, the result should be at once both confidence and humility. Our truth, such as it is, has its indispensable part in the one transcendent Experience and is so far secure. But that any particular truths of ours, as we conceive them, should be unconditioned and absolute, seems hardly probable.

II.—EDWARD CAIRD AS A PHILOSOPHICAL TEACHER.

By J. S. Mackenzie.

The close of the career of a philosophical teacher so distinguished and influential as the late Dr. Edward Caird is naturally regarded as an occasion on which some summary of his work may fittingly be attempted. Yet it is not altogether easy to know in what form this may best be done for the readers of such a Journal as this. Details of a purely personal or biographical kind would here be somewhat out of place. On the other hand, any attempt to expound or analyse his writings would seem to be almost an impertinence. If water chokes us—to use one of his own quotations—what shall we take to wash it down? The prince of expositors can hardly be in need of exposition. The best that could be done in this way would be to bring together, from some of his own writings, a number of passages in which his most central conceptions are enforced; and this has already been done in an admirable way by one of the earliest and most distinguished of his pupils,[1] and is readily accessible to any readers of Mind who may feel that it would be helpful. To readers of this Journal, however, his general position may be assumed to be familiar; and the bulk of his writings may be supposed to be, in some degree, known. Yet his most elaborate work—that on the philosophy of Kant—is probably less read than it ought to be even by professed students of philosophy; and the real basis of his philosophical teaching

[1] Prof. John Watson in an article on 'The Idealism of Edward Caird' which appeared in *The Philosophical Review*, vol. xviii., Nos. 2 and 3. I may refer also to the same writer's article on 'Edward Caird as a Teacher and Thinker,' and to the one entitled 'Edward Caird: a Reminiscence' by Prof. J. Cappon—both of which appeared in the *Queen's Quarterly*, Canada; and to one by Prof. R. M. Wenley in *The Harvard Theological Review*, April, 1909, which contains a complete bibliography. Many other accounts of his work and personality have already appeared; and it is to be hoped that the scattered references contained in these will be brought together before long in the form of a permanent Memoir.

is, in consequence, not always fully realised, and is, indeed, even in some danger of being seriously misconceived. Hence it may not be wholly unprofitable to try to give a general statement of his philosophical position, with special reference to some recent criticisms, in which it seems to me that such misconceptions may be traced. Indeed, notwithstanding Caird's undeniable excellence as an expositor, it is still true that some attempt to bring home the net outcome of his philosophical labours, in relation to other work of a similar or contrasted kind, is specially called for. For it was rather characteristic of his method of exposition that he seldom paused to sum up its final outcome. He had a strong conviction that results in philosophy, apart from the process by which they are reached, are almost worse than useless; and, though I think he would have agreed that a process without any definite outcome, a mere dialectical exercise, is equally worthless, yet he probably considered on the whole that the danger on that side is not as great. Most men are more ready to pick up the golden apples than to run the race; and, in his published writings at least, he was never willing to offer much concession to this weakness. For that reason, however, there is apt to be some vagueness in the minds of many readers as to what the final outcome of the discussions is. Now, I certainly cannot hope, in such a paper as the present, to do much in the way of removing the difficulty to which I refer; especially as my own interpretation of the results may very probably be a biassed one. Yet one who for some time sat at his feet, who has been in personal contact with him for a considerable number of years, and who has felt the difficulty of bringing together the results of his line of thought as a coherent whole, may be entitled to believe that an effort to summarise these results may be of some assistance to other readers who have not had the same opportunities for forming a judgment. It is my intention, then, in this article, to try to sum up in my own way, without special reference to Caird's modes of statement, what appear to me to be the most essential features of his philosophical teaching; distinguishing that teaching from other views that bear a close resemblance to it, and indicating how some of the leading objections that have been brought against it may be met. The objections that I have chiefly in mind are those that have been urged from the point of view of the new Realism and from that of Pragmatism or Pluralism. But, before proceeding to the consideration of these, some remarks of a more general kind on Caird's work in philosophy may here be in place.

In any estimate of the services that were rendered by Caird to the philosophical development of his generation, it is important to remember that, throughout the whole, or at least much the greater part, of his career, he was even more of a teacher than a writer. His teaching work, especially during his long period [1] as Professor of Moral Philosophy in Glasgow, had a value, which it would not be easy to overrate, in stimulating an interest in the subject, and communicating something of the largeness of his own conception of it, in the young minds with which he came in contact. The most striking results of this are seen in the writings of such faithful disciples as Profs. John Watson and Henry Jones, in whom its best traditions are carried on with a power that is at least comparable to his own; but it is to be traced also throughout a much wider commonalty. His ordinary class sometimes contained as many as 250 students at a time; and few left it without some lasting mark of his influence. As a teacher, he was generally recognised as one of the most effective—if not the most effective—of his time. His success did not depend on oratorical devices of the kind commonly described as popular, but rather on the care and thoroughness of his work. He could hardly be called an eloquent speaker; and his manner in lecturing did not always convey that impression of easy flow which was characteristic of his writing. But he spoke with great weight and fulness of illustration, repeating important ideas over and over again in different forms; so that, in the end, there was scarcely any one who was not, in some way or other, impressed by them. His teaching was distinguished by a very unusual breadth of treatment. The literary, historical, religious, and even the legal aspects of philosophical ideas were frequently emphasised, as well as problems of a more purely theoretical type. This broad outlook upon life was very characteristic of Caird. His mind was cast in a large mould, and he looked habitually at all the aspects of a subject. It may be that this tendency carries with it a certain defect, a certain vagueness in points of detail, a certain lack of clear-cut edges; but, for young students at least, it had the utmost value in opening up a fresh outlook on almost every side of life. Not only philosophy, but history, poetry, politics, religion, seemed to wear a new aspect for students who had been through his classes. To many it appeared like the revelation of a new heaven and a new earth. Here, however, it would hardly be in place to

[1] More than a quarter of a century. During a considerable part of this time, he taught Political Economy as well as Moral Philosophy.

dwell further on this aspect of his work, or upon his services to University organisation and social progress. It is with his work as a thinker and writer, rather than as a teacher or a man of affairs, that we must here be mainly concerned.

Even in considering his work as a thinker and writer, however, we cannot altogether ignore circumstances of a somewhat personal kind. In philosophical work—more perhaps than in any other kind of work, except poetry—the whole personality of a man tends to enter in, and has to be taken into account. That Caird was a Scot, for instance, is a fact not without significance in determining his general habit of thought. It is no doubt dangerous to dogmatise on national characteristics; but there are two things generally ascribed to Scotchmen, which were in him eminently noticeable—two things apparently opposed, and yet surely not requiring any Hegelian dialectic to reconcile. He had, on the one hand, a certain *perfervidum ingenium*—a deep-seated enthusiasm for ideas; and, on the other hand, a marked degree of caution in their development and application. He was a poet at heart, but with the constant curb of stern logic and rigorous self-criticism. As he was speaking the fire burned; and some were apt to think him overconfident, almost too much of a prophet, in the promulgation of his creed. Others complained of a certain hesitancy on ultimate issues, lack of detailed applications and positive results. I suppose it was this element of reserve that was in the mind of William James when—in one of the latest brandishings of his philosophical shillelah—he complained that British idealism tended to be rather thin. He thinks apparently that it ought to be fed up and fattened on such speculations as that with regard to the reality of the World-soul. Every one must admire the freshness of James's utterances on philosophical questions. He is one of the glories of our philosophical literature; and whether he gives us theories of emotion or of pluralism or of pragmatism, whether he discourses on organic resonance, on religious beliefs, or on the omnipotence of the will, we can always feel confident that he will not halt half-way, or be held back, in the language of Plato, by any fear of plunging into an abyss of nonsense. Perhaps there is a more stimulating air on the other side of the Atlantic. Within these shores—even when not on the northern side of the border—our thought is seldom so adventurous. It is not often that our best writers are guilty of rushing in where angels fear to tread. We are always conscious of the bridle, even in such purely English writers as Newton, Locke, and Darwin. Now, it is not my aim to vindicate this characteristic. It is

not, I think, found in those Germans to whom our British idealism is most indebted, with the possible exception of Kant, who was not purely German. Wisdom is no doubt justified of all her children. There is a place for unrestrained exuberance, as well as for the more patient builder. I only note that Caird was in the latter class; and may add that, with him at least, caution did not imply any lack of enthusiasm, or any tendency not to press his arguments to their full logical issue. It only meant that he was silent where he did not know. He gave the reins to his thought, but not to his fancy. He did not, like Plato, fill up the gaps in his reasoning with any form of mythology.

But certainly his caution did not mean any lack of fervour or of firm conviction. He never wavered in his strenuous support of the way of thinking that is specially associated with the name of Hegel. If he did not care to describe himself as a disciple of Hegel, it was only because, as he himself said, 'the days of discipleship are past'. It is of the very essence of the Hegelian view, that philosophy is an evolution; that its history is that of the mind of man at work; that truth is not to be found summed up in any one system, but is rather to be seen unfolding itself in all. This view was certainly very fundamental with Caird; and it was combined with the conviction that the ultimate truth is to be found embodied in religion and poetry, as well as in what is technically known as philosophy. Though not a pragmatist, he was certainly, in the best sense of the word, a humanist. He believed that the emotions and the will, as well as pure logic, have a legitimate part to play in fashioning our outlook on the world; or rather he shared, on the whole, Carlyle's objection to the separation of human faculties, and held that a man thinks, feels and lives with his whole nature. His was, indeed, one of those finely balanced natures in which the elements were in such constant harmony that they hardly seemed to be distinguishable modes of spiritual being. He passed readily from poetry to philosophy, and from both to religion, without any sense of a *μετάβασις εἰς ἄλλο γένος*. This attitude of mind was of course not altogether peculiar to Caird. It is traceable, in large measure, to the humanistic atmosphere which has tended to prevail both in Oxford and in the Scottish Universities. But it may be doubted whether any one since Plato—or should I say rather since Lucretius?—ever showed a more harmonious blending of the spirit of philosophy with that of poetry, religion, and social reform than that which was to be found in Caird. Yet he never yielded to the temptation to substitute a poetical intuition

for a logical argument. Like St. Anselm—though with a difference—he might have taken for his motto *credo ut intelligam*. He drank in his convictions from the insight of the poets and prophets, and then went on to prove them. For such a mind there could hardly be any question of direct discipleship. As it was said of Wordsworth that every mountain was his favourite, and that he would never give his word against any; so it might be truly said of Caird that he lived habitually among the mountain-peaks of human thought and feeling, and realised his kinship with them all. Among the philosophers, however, Plato, Aristotle, Spinoza, Kant and Hegel were, I think, his special favourites;[1] and among the poets the Greek tragedians, Dante, Shakespeare, Goethe and Wordsworth.[2] But his sympathies, both in literature and in philosophy, were certainly very catholic; and his range of knowledge was extraordinarily wide. He had probably not as minutely accurate a scholarship as the late Prof. Adamson; but there cannot have been many others whose knowledge was more comprehensive. Yet his learning was as far removed from pedantry as his literary interest was from dilettantism. In his study of the great philosophers and poets, he was always seeking for a deeper insight into the nature of the universe and of human life. Of the physical sciences he had, I believe, comparatively little knowledge; but he had given a good deal of attention to botany, and was certainly well able to appreciate the work of Darwin, for which he had the highest admiration. In general, there were not many who had made themselves more fully at home in their world, or who were less liable to any one-sided fanaticism.

It is true, however, that he was, in all essentials, a disciple of Hegel. By what steps he was led to this position I am not able definitely to state. It is probable that, like many others of his generation, he received from Carlyle the most potent of his early incitements towards speculative thought. Carlyle of course pointed him directly to Goethe, whose way of thinking became thereafter a very essential part of his spiritual equipment. To one who thus starts with a conviction of the essential unity of man's spiritual nature, and of the universe to which that nature is related; and especially to any one who has been profoundly influenced

[1] Perhaps, at least in his later years, Plotinus should be added. In general, it may be said that he was specially interested in attempts to bring together Eastern and Western modes of thought. This is seen more particularly in his book (in some respects the finest he ever wrote) on *The Evolution of Theology in the Greek Philosophers*.

[2] Most of these are dealt with in his *Essays on Literature and Philosophy*.

by Goethe's manner of giving expression to this conviction; the philosophy of Spinoza presents itself at first as the most obvious scientific basis. It was Goethe's own speculative resource; and there can be little doubt that for Caird also this particular philosophy had always a certain unique fascination. Indeed, to any mind of a poetic, religious, and deeply speculative type—as we see in the case of our own Shelley, as well as Goethe—such a philosophy as that of Spinoza can hardly fail to make a strong appeal; like that which was made, in an earlier time, by the poem of his great prototype Parmenides. The mathematical setting of the one and the materialistic setting of the other are not likely long to deceive any mind of genuine philosophic insight with regard to the essential character of such systems. For, when any one says that All is One, or that the Infinite alone is real, it is evident that the nature of the One or the Infinite must somehow contain in itself what is highest and most complex as well as what is lowest and simplest; and it cannot, therefore, be in its essence geometrical or materialistic, whatever the language may seem to imply. The real enemy of idealism, as Caird always recognised, is not materialism, but dualism. Nevertheless, the contradiction between the form and the essence in the system of Spinoza soon becomes sufficiently apparent. Substance cannot be quite the right word for the ultimate reality, any more than the being or the well-poised sphere of Parmenides. We must, in some way or other, pass from substance to subject—a process which was accomplished in ancient thought by the transition from Parmenides to Plato, and in modern by that from Spinoza to Hegel. I believe that it was substantially in some such way as this that Caird was led in the end to find in Hegel, more than in any one else, the kind of solution for the riddle of the universe for which he had been in search. He did not, however, become simply a passive recipient of the Hegelian creed, or even simply an active interpreter of it. It seemed to him that the most important thing to do was not to expound the work of Hegel, but rather to show its necessity, by bringing out the main lines in the development of thought that lead up inevitably to some such system as that which Hegel established.

In order to appreciate rightly the work that Caird thus set himself to do, it is necessary to remember what the condition of philosophy was at the time when he began to write. The school that traces its filiation to Locke, Berkeley and Hume was still the dominant one in this country. The influence of German idealism had been but slightly felt through

its imperfect echoes in Coleridge, Whewell, Hamilton and Ferrier, though, in a more purely literary form, it had already shown its power in Wordsworth, Shelley, Carlyle, Browning, and others. There was thus a decided conflict between the poetical and religious ideas of the age on the one hand and its scientific and philosophical principles on the other. It was the chief work of Caird to effect a reconciliation between them; and both he and T. H. Green, who worked throughout hand in hand,[1] felt it to be their first business to bring the main conceptions of German idealism into direct relation to the prevailing tendencies of thought in their time. Green undertook an elaborate criticism of Locke, Berkeley and Hume, and carried on a less systematic polemic against some more recent writers; and afterwards made it his main business to formulate the ethical side of the new idealism, in relation to the types of utilitarianism that were then current —especially those of J. S. Mill and H. Sidgwick. Caird, on the other hand, took as his main task the criticism of the continental writers from Descartes to Kant, dealing at some length with the Cartesian school, and giving a very elaborate exposition and criticism of the work of Kant, showing how his philosophy leads up to a more definite type of idealism than that which he had himself conceived; dealing less systematically with Hegel and Comte; and finally—his most congenial task—seeking to bring out the religious aspects of his philosophical position. It was of course for the support of the religious or poetic view of life that his whole work was designed; but he felt it to be necessary to dig deep in order to lay the foundations firmly.

It may be well to note here, however, that, though Green and Caird were thus working hand in hand, there was always some degree of difference between them: and, as the former was the more patently constructive of the two and, through his position in Oxford, the more immediately influential among the rising generation of writers, it is probable that the distinguishing features of Caird's position were not very fully realised. Though it fell to Caird to be the exponent of Kant, Green was by far the more Kantian of the two. He based his metaphysical construction on what has since been shown to be a misquotation from Kant, to the effect that 'the understanding makes nature, but does not create it'. Taking this as a summary of the Kantian view, Green sought to amend it by representing nature as created by

[1] Of course Hutchison Stirling also, who worked independently, undertook a very similar task: and he was somewhat earlier in the field.

an 'eternal consciousness,' which reproduces itself in the human intelligence; a view which appears in the end to leave the essential difficulty of the Kantian philosophy—the fundamental opposition between the eternal reality and the appearance of a world in time—very nearly where it was. Similarly, on the ethical side, Green reproduces the categorical imperative of Kant, and even makes the Kantian position still more extreme by insisting, without qualification, that the only and complete good is the good will. It is true that here also he introduces a modification into the Kantian statement by representing the good will as realising itself through a world-process; but the process does not appear, for him any more than for Kant, to furnish the will with a real content. On the whole, the most that can be said for Green, whether on the metaphysical or on the ethical side, is that he points to certain conceptions by which the Kantian system might have been remodelled; but he does not actually show us how it is to be remodelled by means of them. Rather, it still remains on his hands, with all its leading features intact, and all its most urgent difficulties unresolved.

Now, it is no doubt true to say that the conceptions with which Caird was working were substantially the same as those that were in the mind of Green. But he carried them farther, both on the metaphysical and on the ethical side, and passed over more completely, by means of them, from the point of view of Kant to that of Hegel. How far his views are actually to be identified with those of Hegel it is not easy to determine; nor, perhaps, is it of very much importance to attempt it. Though he wrote an exceedingly interesting sketch of Hegel's life and work, and though he often read some of Hegel's writings with his more advanced students, yet he refrained from any attempt to expound the system in detail. He preferred to saturate himself with its spirit, to prepare the way for the establishment of its general principles, and to show its applications in the interpretation of some of the most important aspects of life. He certainly was not prepared to accept everything in the writings of Hegel as true. He thought, for instance, that Hegel was unjust in some of his criticisms of Kant, and premature in some of his attempts to interpret the results of the physical sciences; and I believe he would to some extent have agreed with Green in thinking that the scheme of the categories would require a good deal of reconsideration in its details. On the other hand, he would certainly have defended Hegel against some of the recent criticisms of Dr. McTaggart, whose subordination of the element of negativity, in particular, he considered to be a

serious mistake. On the whole, he undoubtedly believed that the general conception of idealism to which he had been led was in its essence identical with that of Hegel.

Readers of MIND can hardly need to be informed what that conception was. Yet it is to be feared that the common knowledge of it is often accompanied by a good deal of misunderstanding. The term idealism, by which the general point of view is usually described, carries to most minds—even minds trained in philosophical distinctions—certain associations that are apt to be in a high degree misleading. In particular, it is very difficult for the British mind to dissociate the term from the special significance that was given to it by the philosophy of Berkeley. Though it is generally known that modern idealism rests rather on Kant than on Berkeley, and that Kant believed himself to have given a cogent refutation of the kind of idealism that Berkeley represents, yet we constantly find both the supporters and the critics of idealism falling back upon modes of statement that are essentially Berkeleyan, and that are not merely incompatible with such an idealism as that of Caird, but often even diametrically opposed to it. For surely it cannot be denied that the Kantian and post-Kantian idealism rests on the rejection of the initial postulate of the Berkeleyan. It substitutes an objective order for the purely subjective determinations with which Berkeleyanism sets out. This is generally admitted; but I am afraid its implications are not, in general, very fully recognised.

The common view appears to be that modern idealism differs from Berkeley's mainly by the substitution of *intelligi* for *percipi*—a substitution which Berkeley himself was well on the way to make. It is regarded as having made some advance in the analysis of the content of experience, but not any essential change in its epistemological standpoint. It is from this point of view, for instance, that modern idealism is criticised by Mr. G. E. Moore; and it must be confessed that there is a good deal of justification for such criticism in the language of many—perhaps even of most—of our recent idealists. Now, to represent the change as simply one from *percipi* to *intelligi* might be accepted as a true account, if all that is implied in such a change were fully realised; but it is apt to be thought of as if it were only a slight—almost a verbal—improvement. Perhaps Green's mode of statement, among others, has tended to encourage the view that the modification is a comparatively insignificant one; for Green no doubt tends to speak as if the mind, in understanding the world, were at the same time creating it; just as Berkeley

tends to speak as if the mind were the creator of its own ideas. The objectivity of the world that we apprehend is in this way at least ignored or minimised. The more recent tendency to use the word 'experience' as covering the content of our knowledge has also favoured a similar interpretation. It is too apt to be assumed that thought or knowledge may be treated simply as something in the mind of a particular individual, just as an 'idea' may be so treated; and in this way we are brought back to the Berkeleyan position, his 'notions' being of course included along with his 'ideas'. What is called 'personal idealism' is no doubt more particularly associated with this way of thinking—a point of view of which Dr. Rashdall is probably the best representative. But there are distinct traces of it in many other writers. The chapter on immortality in Dr. McTaggart's *Dogmas of Religion* seems to be a piece of almost pure Berkeleyanism. Even Mr. Bradley, who in his *Principles of Logic* did so much to open up a truer way of thinking, especially by his admirable criticism of Associationism and by his clear distinction between the existence and the meaning of ideas, seems in some of his later writings—in spite of his steadfast insistence upon coherence as the ultimate test of reality—to have very largely succumbed to the fatal spell of subjectivism. Now, it was certainly one of the great merits of Caird that he kept himself singularly clear from this particular pitfall. It is hardly too much to say that, in his epistemological outlook, he was as far removed from Berkeley as he was from Reid.

The refutation of the Berkeleyan type of idealism is, indeed, not difficult; and it has been done over and over again, from the time of Reid and Kant to our own. Yet nothing could well be more important for philosophy than to press that refutation. It is that false idealism, more than anything else, that blocks the way of the true. For it is easy to see that the false type of idealism leads by inevitable steps to the devouring gulf of solipsism, from which the mind at once recoils. If once we allow that the existence of things consists only in their being known, it is soon seen to be impossible to exempt spiritual substance or any other kind of reality from this fatal doom. No objective world is left. Even we ourselves become nothing but shadowy ideas in our own minds. Nothing could well be further removed than this from idealism in any true sense of the word—idealism such as that which is represented by Plato. From this point of view, the work of the supporters of the New Realism, as I have already urged in a previous article, is of the utmost value. The essential point in their contention I take to be that facts of conscious-

ness always involve an objective reference, as well as a subjective reference. This applies even to what are called the secondary qualities of things. To be conscious of green is not to have a green consciousness: just as to be conscious of extension is not to have an extended consciousness. In both cases we are apprehending something which has to be distinguished from the act of apprehending, and which we refer to the objective world. It may be urged, no doubt, that this does not apply to simple organic sensations or to pure feeling. We naturally say 'I am hungry,' or 'I am pleased'; though we do not naturally say 'I am green,' or 'I am a triangle'. But, even in the former instances, reflexion might lead us to see that it would be a truer mode of expression to say 'I am conscious of an organic want,' and 'I am conscious of something as yielding pleasure'. The element of objective reference is not entirely absent even in these instances. It is, however, instances of this kind that tend to give colour to the distinction between the apprehension of pure states of our consciousness and the reference to an objective world, and to the contention that we can separate the one thing absolutely from the other. Once we grant this, it is natural to maintain that we begin with what is purely subjective and advance from this to the affirmation of an objective world. The next step is to urge that we have no real ground for this affirmation. It was this point of view that gave rise to the dualism of Descartes and afterwards to the more pure subjectivism of Locke, Berkeley and Hume. Reid was quite right in urging that it was this view that was the fundamental error to be resisted in his time; and it is perhaps true that the service he thus rendered to philosophy has hardly been sufficiently recognised. Prof. Pringle-Pattison emphasised this very well in his series of lectures on *The Scottish Philosophy*, and rightly urged that in Reid's contention, so far, there is nothing in any way antagonistic to a true idealism. Kant also, though with a somewhat less direct emphasis than Reid, rejected the fundamental basis on which the philosophies both of Descartes and of Berkeley rested.

The objection to such a realism as that of Reid is not that it recognises that we are in contact with an objective order; but that it is too naïve in its interpretation of that order. In this respect also our newer realism, though much more reflective than that of Reid, appears to be almost equally at fault. Recognising that we are in contact with an objective system, we have still to ask ourselves what exactly we are entitled to refer to that system; and it soon becomes evident that we must draw some distinction between appearance and

reality. Even the most ordinary common sense recognises that some things that present themselves to us are illusory —*i.e.*, that their place in the objective system of reality is not exactly that which at first it appears to be. If we are to have any philosophical theory of reality at all, we must be able to draw some distinction between the first appearance of things and the view of their nature which subsequent reflexion leads us to take. It is here that the Kantian philosophy shows its superiority to ordinary realism. The real world of nature is for Kant a systematic order interpreted by thought. Kant, however, holds that the world, even as thus interpreted, is still a distorted world; and that the ultimate reality, as it is in itself, remains inaccessible even to thought; and is, at the best, only dimly apprehended by a rational faith. Here of course Caird separates himself from Kant. Thought, he conceives, is able to grasp reality, and does not ultimately fail in its attempt to interpret it.

The first and most fundamental contention of such an idealism as that of Caird is that the world is to be regarded as intelligible through and through. It is in this sense that he holds that *esse* is *intelligi*. The world as we ultimately think it, when we are trying to make it thoroughly intelligible to ourselves, is the real world. It is because this is the most essential point in idealism that Parmenides and Spinoza are rightly reckoned among its founders. The current misconception of the real meaning of such an idealism as that of Caird has led to the denial that Parmenides has any claim to be connected with it. He founded materialism, it is said, rather than idealism; and in a sense this is true enough. It is also true to say that Spinoza's conception of the infinite substance is in the end too geometrical to be truly idealistic. But it is certainly through Parmenides and Spinoza, rather than through Protagoras and Berkeley, that we may hope to reach a true idealism. Parmenides was the founder of idealism in the sense that he was the first who clearly opposed the world as we think it to the world of sense or unreflective opinion; and who definitely maintained that the former is the world of reality. No doubt his way of thinking of the world that is ultimately intelligible to us was extremely inadequate; and it is here that we come to the second great requirement of modern idealism.

The second fundamental contention is that the only kind of universe that is really intelligible to us is a universe that is intrinsically spiritual. But this again is apt to be misconceived. It does not mean what Berkeley understood by it—and what such modern writers as Drs. McTaggart and Rash-

dall seem to understand—that nothing really exists but spirits and their ideas. Caird's view is rather that the universe comes to the consciousness of itself in spirit; but that the process through which this consciousness arises is a real process, and involves the existence of real stages that are not in themselves spirit, but rather the necessary 'other' of spirit. The element of negation, in short, is for Caird real and essential. This does not, however, imply any ultimate dualism; since the element of negation finds its explanation in the spiritual result that is realised through it.

The universe, as Caird conceived it, is an organic system, developing towards the complete and self-conscious expression of that which is from the first implied in it. This view involves that the time-series through which the world unfolds itself is at once real and unreal—real as exhibiting an actual process of development, unreal inasmuch as what thus develops in time is, in some true sense, there from the beginning. Caird believed that this can be made intelligible by thinking of the reality of an eternal divine principle, of which the world that develops in time is the counterpart or real 'other'. This divine principle is of course not to be thought of as prior in time to the world-process, or as the creator of that process. Rather the eternal mind for which the world is and the evolution of that world in time are two essential aspects of the same reality. The existence of such a self-conscious mind implies the existence of its other. The two sides correspond broadly to the *natura naturans* and *natura naturata* of Spinoza; but the antithesis thus expressed finds a much more real place in the philosophy of Caird than it could have in that of Spinoza. The one side may be called the ground or explanation of the other, but not its antecedent —the ultimate nature of explanation being akin rather to final cause than to efficient cause. The world exists, in other words, because it is involved in the divine purpose, not because it is brought about by any temporal act. The unfolding of the world lies eternally in the divine essence.

I think it is involved in this view of Caird that the time-series must be regarded as limited, having a real beginning and end—though of course there could not be anything before the beginning or after the end. It must be regarded, in short, as a closed circle; and, as I have elsewhere urged, there does not seem to be any real difficulty in such a conception. I do not find, however, that this view was ever definitely put forward either by Caird or by his master Hegel; and, in referring to it here, therefore, I am only indicating something that seems to be necessary to complete

their view. It is important, especially in view of the many difficulties that have recently been raised about time, that this point should not be altogether overlooked. Dr. McTaggart, in particular, has emphasised the unreality of time in a remarkably clear and cogent fashion. And certainly it seems impossible to maintain the ultimate reality of the events in time regarded simply as a successive series. The transience of time cannot be accepted as ultimately real. Dr. McTaggart, however, himself allows that there is a real time-order; and this is all that seems to be important for the significance of process.[1] Now, Caird's conception, as I understand it, is that the time-order represents a process through which the world advances to an ultimate union with the divine principle which is its presupposition. The ultimate significance of the time-series appears at its end, which is identical with its beginning, and which is in truth eternal—the unfolding of the world being simply the exhibition of what it always essentially is. The time-order is eternally there; though for those who participate in its process it appears as a successive series.

A view of this kind is no doubt sufficiently paradoxical; and it is not altogether surprising that it has not won a very large number of adherents. The objections that naturally occur to it are of two types. On the other hand, it may be urged that it does not really give us an intelligible conception of the universe. It may be contended that there remains in it an inner incoherence. Or, on the other hand, it may be urged, that, though in itself perfectly intelligible and coherent, it is not sufficiently in touch with the facts of our experience, and cannot therefore be scientifically established. It may be contended that Caird's philosophy is still, as that of Leibniz was said to be, a sort of fairy-tale of speculation, comparable rather to the 'dreams of a ghost-seer' than to the system of a man of science. A few words may be useful on both these classes of objections.

The question as to the ultimate intelligibility of Caird's theory may be put most simply in this way. His view involves the conception of an eternal mind in relation to a temporal process. Now, it may be contended, either that

[1] More definitely it may be said that transience (Dr. McTaggart's A series) must be regarded as unreal; but that order (his C series) and direction (his B series) must both be regarded as real. The fundamental importance of direction (recently emphasised by Goldscheid) has been sadly overlooked by most of our philosophical writers. The series of numbers is surely a sufficient example of the possibility of order and direction without time transience.

the temporal process would be just as intelligible without the eternal mind, or that the eternal mind would be just as intelligible (perhaps even more intelligible) without the temporal process. If neither of these objections is sound, I think it must be allowed that the unity of the two sides, as conceived by Caird, does help to make the universe intelligible.

Few are likely to contend that the temporal series is in itself intelligible. A simple succession of events in time would have no explanation beyond itself, and could hardly be supposed to be *causa sui* or its own explanation. If any one is inclined to adopt such a supposition, he may be recommended to study the difficulties brought out in the Kantian antinomies, or those that have more recently been urged by such writers as Bradley and McTaggart. If the temporal series is thought of as limited, some account of its beginning would be required. If, on the other hand, it is thought of as unlimited, we must then suppose, as Kant put it, that an infinite series has been completed up to the present moment; or, to put it a little differently, that the time series is one of which the *n*th member (whatever *n* may be) is always infinite; and this does not appear to be a possible mathematical conception. It seems clear, therefore, that the temporal series must, in some way or other, be thought of not simply as a series of successive members, but as in its essence eternal. It may be urged, however, that we can think of it in this way without the conception of an eternal mind; and that this conception does not make it any easier for us to understand it. We might, for instance, say simply that the eternal nature that is involved in the temporal series, is something for us unknown and unknowable. But this at least is not a view that makes it intelligible—which is the point at present under consideration. Or we might think of it after the manner of Mr. Bradley's 'Absolute'. But his last word also is that 'Reality is one experience, self-pervading and superior to mere relations. Its character is . . . in the end, the sole perfect realisation of spirit. . . . Outside of spirit there is not, and there cannot be, any reality, and, the more that anything is spiritual, so much the more is it veritably real.' This has of course to be qualified by the somewhat questionable doctrine of 'Degrees of Reality'; and, when it is so qualified, it does not appear to be intrinsically different from the view of Caird—except that the use of the term 'experience' would have seemed to Caird somewhat objectionable. Or are we to say rather, as McTaggart and Howison appear to do, that the eternal reality underlying the temporal series consists of a multi-

plicity of spirits, rather than of the unity of an eternal mind? If so, then I think it might be urged that, just as the ancient Atomists recognised that their 'many' must possess the characteristics of the Parmenidean 'one,' so this multiplicity of spirits must have the essential characteristics that Caird ascribes to the one eternal mind. They must, that is to say, be eternal in their nature, and they must also contain the explanation of the temporal series. Now, the order of the temporal series is surely a single order; and to admit that it finds its explanation in the eternal nature of spirit is surely to admit that the eternal reality is at least one as well as many. Now, Caird of course recognised that there is a real multiplicity of spirits, and even, in one of his latest writings,[1] contended that they must be thought of as immortal. The ultimate difference between Caird and McTaggart—if I understand the two positions rightly—is that the former referred the multiplicity to the development of self-conscious personalities in time, while he thought of the unity as belonging to the eternal mind of which the world in time is the expression or 'other'; whereas McTaggart regards the multiplicity as belonging to the nature of the eternal, as well as to the series in time. This is a comparatively subordinate divergence; but I think Caird's view has a distinct superiority, which some of the considerations that follow may help to bring out.

What has now been urged may at least serve to show that, if we refuse to accept the hypothesis put forward by Caird, and yet seek to arrive at an intelligible view of the universe, we are driven to other hypotheses which are very little different from that of Caird. But now it may be said that, if the consideration of the temporal series leads us to think of an eternal mind or an eternal multiplicity of spirits, there is at least no possibility of reversing the process. The thought of an eternal mind, it may be contended, furnishes no explanation of the existence, or apparent existence, of a temporal series. This difficulty seems to have been felt by Green in connexion with his postulate of an eternal consciousness, which is certainly not far removed from that of Caird. 'Why any detail of the world,' he says,[2] 'is what it is, we can explain by reference to other details which determine it; but why the whole should be what it is, why the mind which the world implies should exhibit itself in a

[1] *Lay Sermons and Addresses.* It must be confessed, however, that Caird had no definite theory as to the nature of such personal immortality. Still less did he speculate on the problem of pre-existence.

[2] *Prolegomena to Ethics*, book i., chap. iii.

world at all, why it should make certain processes of that world organic to a reproduction of itself under limitations which the use of such organs involves—these are questions which, owing perhaps to those very limitations, we are equally unable to avoid asking and to answer. We have to content ourselves with saying that, strange as it may seem, it is so.' But is it so very strange? It may be suspected that the strangeness of it is due in the main to the somewhat abstract way in which the eternal consciousness tended to be conceived by Green, as if it were something prior to and independent of the world-process through which it is revealed. It was this way of thinking that Caird sought most strenuously to avoid. An intelligence without an objective world as its 'other' seemed to him inconceivable, as meaningless as a circle without a circumference. It was not a question, therefore, of creation or reproduction, but rather of an eternal process. An eternal intelligence, Caird conceived, could only realise itself through a world which appears at first as the opposite of itself. This, he thought, is the supreme instance of that activity of 'self-realisation through self-sacrifice,' which is the key to the life of the universe. The relation of the temporal process to the divine intelligence is thus regarded as an intrinsic one, and there is no real meaning in the question suggested by Green.

The considerations thus briefly set forth may serve to show that the hypothesis put forward by Caird does at least supply us with an intelligible theory of the universe. But it may still be urged that it is not a strictly scientific hypothesis. The explanation to which it refers us is not, it may be said, of the nature of a *vera causa*. We cannot establish it by means of any of the facts of our experience; and there are even some of these facts that appear to be inconsistent with it. In answer to this, it may be noted, first of all, that a philosophical hypothesis is hardly on the same footing as a purely scientific one. In the case of the latter, we are generally concerned with some special facts that may be used to explain other facts, and that may be verified by independent methods. From the nature of the case, a philosophical hypothesis does not admit of any similar tests. If we accept it, we must do so on the ground that it is an intelligible hypothesis, and that it is the only hypothesis we can find that is both intelligible in itself and capable of making the universe as we know it intelligible. This, I believe, is the element of truth in the pragmatist position; and I think it was fully accepted by Caird, as by most other idealists. The test of the truth of a philosophical hypothesis is that it

'works' if by 'working' is meant enabling us to deal in an intelligible way with the facts of our experience—and this is what the pragmatists, in some of their statements, appear to mean. The question, then, is—Does the hypothesis of idealism, as understood by Caird, 'work' in this sense? Now, the contention of a considerable number of recent critics, writing from a great variety of standpoints, but with very similar arguments, is to the effect that the idealistic hypothesis, though in itself intelligible and coherent, does not succeed in making the actual world of our experience intelligible. Though intelligible as a general statement, it fails in its application to detail. I must now try to put this objection as clearly as possible, so far as I am able to understand it.

The objection, as it presents itself to most minds, runs somewhat as follows. If we are to regard the universe as the expression of an eternal mind, this must mean—as Plato urged in the *Phædo*—that it is the realisation of an eternal purpose. Now, even if we do not accept the Socratic *dictum*, as regards purely human purposes, that no one is willingly deprived of the good, it is at least hardly credible that there should be such a wilful deprivation on the part of the eternal mind; and, if not wilful, then there cannot be such a deprivation at all, since we are assuming that the world is the expression of this very purpose. We must, therefore, on this hypothesis, accept, in the fullest sense, an optimistic interpretation of the universe. We must believe, with Leibniz, that it is the best of all possible worlds. Now, it is contended by many that we can hardly doubt that it is at least possible to conceive of a better universe than that in which we find ourselves. A universe, it is urged, that had no evil in it at all, and not even the illusion of any evil—a Parmenidean universe, as we might say, without any negativity—would be better than that in which we actually are; and no general grounds can be assigned for the impossibility of such a universe. Leibniz himself admitted that we could not explain the 'incompossibility' of positive qualities; and, if this is admitted, the presence of evil or negation, in any shape or form, would appear to be unintelligible. This is, I think, the chief—perhaps the only real—argument on which modern Pluralism is based; and Pluralism appears to be, in the end, the only real alternative to some such idealism as that of Caird. The new realism and pragmatism, as I have already urged, are not, so far as their fundamental principles are concerned, opposed to idealism. It is only by a misconception that they ever appear to be so. They become op-

posed to it only when they lead—as they both tend to do—to some form of Pluralism; and it is in this that all the opposition to idealism is in the end concentrated. It is to pluralism, therefore, that we must turn if we are to understand the ultimate objections to idealism.

Now, Pluralism of course presents itself in a great variety of forms. Even such a philosophy as that of Leibniz is apt to be characterised as pluralistic; and certainly, on a superficial view, it would seem right so to regard it; and, indeed, even on a deeper view, it must be admitted that it has some pluralistic aspects. Yet the leading ideas of Leibniz are not far removed from those of Spinoza; and it may be doubted whether his philosophy as a whole can really be rendered coherent without reducing it to a form that is scarcely distinguishable from that of modern idealism. It is clear at least that on the main point here under consideration—the existence of a unity of purpose in the universe, implying an optimistic conception of its structure—it is entirely at one with such a theory as that of Caird. The same, as I have already indicated, can hardly be said for such a philosophy as that of McTaggart, which, from the absence of any clear conception of a single purpose, seems to me to be much more truly pluralistic. Yet here also there is certainly the underlying unity of a system; and, indeed, I am somewhat at a loss to understand how this fundamental unity can be reconciled with the degree of pluralism that is still maintained. It would seem that the manifoldness of the system must be capable of explanation from the point of view of the whole; and, if the whole is, in any true sense, to be thought of as spiritual, this would seem to imply that it does contain a certain unity of purpose, pointing to the realisation of the best. Hence I cannot regard this kind of Pluralism as really distinguishable, in the end, from such a Monism as that of Caird. The position of Dr. Rashdall is, in many respects, closely akin to this; but here at least the elements of unity and plurality are rather more definitely separated off from one another. The diversity of created spirits is set over against the unity of the creative spirit, who is conceived of as being, though creative, yet finite; and it is by this somewhat quaint conception of a finite God that he seeks to account for the element of negativity or evil in the world. God is conceived as aiming at the good, but as being somehow too weak (apparently too weak of will) to bring it about. This view of Rashdall's, which certainly involves a glaring paradox, may be regarded as the connecting link between such a pluralism as that of McTaggart and the more

thoroughgoing pluralism of William James, which I am inclined to accept as the true type of what pluralism ultimately means.

The view of James has certainly been put before us with extraordinary vigour and rare charm of expression. If it fails to convince, it must be from its inherent defects, rather than from any weakness in its advocate. The way in which it has recently been connected with the fascinating work of Bergson has also gone far to commend it. I think we may fairly take James's presentment of pluralism as the best case that can be made out for it. It is the modern version of the philosophy of strife. The din of battle rings through the pages; and in this new doctrine of the *élan vital* we seem to hear once more the old utterance of Heraclitus—'War is the father of all and the lord of all'. Reality, from the point of view here represented, is not a single system, but rather a totality that is sustained only by the perpetual struggle of the vital energies of separate beings. There is, indeed, even from this point of view, the possible recognition of some sort of guiding intelligence that may be described as divine; but with James, much more emphatically than with Rashdall, any such power must be regarded as a finite God. Indeed, it becomes with him what one might call a distinctly Anglo-Saxon type of God—a sort of John Bull of a God who is doing the best he can in the midst of a rather adverse world, and may perhaps be expected somehow to muddle through in the end. Such a being can hardly be regarded as in any way representing the unity of the whole, but rather at the utmost as the strongest and best among the conflicting elements. And certainly it can hardly be denied that a view of this kind harmonises better with the appearance of the world, as it presents itself to us in our ordinary experience, than such a view as that of Caird. A Heraclitean doctrine nearly always seems somewhat nearer to common sense than one of a more Parmenidean type; though both are apt to strike the ordinary intelligence as exaggerating one side of the universe as we know it. The philosophy of the unreflective mind tends to be Manichean; and, as against any such conception, the Parmenidean type of speculation seems more uncompromising than the Heraclitean. If all is flux, there may still be occasional moments of rest; whereas if all is rest, there seems no place for even the appearance of change. But Caird's theory at least is not a doctrine of pure rest, whatever may be the case with some other types of modern idealism. It includes the aspect of change and struggle, as well as that of permanence; whereas I think it will be found that the

ultimate weakness of such a theory as that of James is that it leaves no real place for that element of permanence, without which the universe cannot be made intelligible. It seems to involve the unqualified reality of the time-series, whereas, as I have urged, we can only make that intelligible if we suppose it to be somehow 'rounded with the sleep' of the eternal. This difficulty proves fatal to such a theory as that of James as soon as we confront it with ultimate issues; when we ask, for instance—How long has this process of struggle been going on? Did it ever begin? Can it ever end?

> Denique, tantopere inter se cum maxima mundi
> Pugnent membra, pio nequaquam concita bello;
> Nonne vides aliquam longi certaminis ollis
> Posse dari finem?

James seems to elude these ultimate issues only because he does not claim any ultimate intelligibility for his view. His view seems to be, in the end, that we can make the world partially intelligible to ourselves, but not completely intelligible. This can hardly be called pluralism: it is rather a form of scepticism. On the whole, therefore, I am led to the conclusion that there is no view of the universe, except one more or less of the nature of Caird's, that is really intelligible.

But, if this is the case, then we must try to find some way of meeting the difficulty that led to pluralism—*viz.*, the difficulty with regard to the presence of evil in the universe as we know it. This is undoubtedly the chief, and indeed the only real, difficulty of an idealistic system; and I do not wish to deny that it is a serious one. It seems clear that the only possible way of meeting it is by saying that what presents itself to us as evil is somehow a necessary condition of what is, in the ultimate sense, good. In concrete cases this seems to be in accordance with our actual experience. Fortitude is generally regarded as one of the qualities that are admirable in man; yet it seems inconceivable apart from pain, which to most people appears to be an evil. And further reflexion may serve to show that none of the things that we most value can really be thought of by us without some relation to what presents itself to us as evil. It may be doubted, therefore, whether good is really intelligible out of relation to evil. This is a question, of course, that could not be properly discussed without a thorough consideration of what is meant by good and evil; and we must, therefore, content ourselves here with these slight and unsatisfactory hints. But now at this point some are inclined to urge that, even granting that good and evil are only intelligible to us in relation to each

other, the conditions of intelligibility might yet have been different from what they are; and that a universe in which good was intelligible without evil would be better than one in which it is not. I must confess that this seems to me to carry us beyond the limits of legitimate speculation. Philosophy has done enough if it can show that, from a certain point of view, the universe becomes intelligible. That the conditions of intelligibility should themselves be accounted for, is a demand that might perhaps be made from the point of view of the whole; or perhaps, from that point of view, it might be seen to be uncalled for. It hardly seems to be a demand that can fairly be made of any human philosophy. At this point I believe we must fall back upon the contention of Green, that the universe as a whole cannot be accounted for. All that we can fairly ask is—On what hypothesis can it be made intelligible? The objection previously made to Green's statement was not, it will be remembered, with reference to this point, but to the attempt to account for the time-process on the assumption that the eternal consciousness is something capable of existing apart from it. If Caird was right in thinking that the key to the universe is to be found in the conception of 'self-realisation through self-sacrifice,' and that this expresses the ultimate nature of spirit, then what we must say is that a universe which conforms to this conception is the only kind of universe that is really intelligible to us.

I am well aware that considerations of this kind are not such as to carry conviction to most men's minds. The difficulties and evils with which we all have to contend in the course of our ordinary experience are too palpable, and the possibilities of transforming them into the vehicles of a higher good are too remote and obscure, for any view of this kind to be readily acceptable. The only argument, indeed, that ever forces its acceptance on any mind at all, is that which has been already set forward, that there seems to be no other view that is capable of making the universe intelligible to us; and this is an argument that can only avail with those who are making a strenuous effort to understand the universe in which they are. This class probably does not include all students of philosophy—perhaps not even all teachers of it. 'The mystics are few.' These few, however, realise, I think, that the alternative to such a philosophy as this is not some other theory of the universe, but rather some kind of confession of ultimate ignorance and mystery. Now, that the attempt to make the universe intelligible may fail in the end, is no doubt a result that we can never deny to be possible

with any complete assurance, so long as our view of the universe is imperfect. So long as we have not finally solved the problem of existence, there is always the possibility that there may be some irreducible surd at the end of it. The philosophic enterprise may be doomed to bankruptcy at the last; and I am disposed to allow that, if it did ever become bankrupt, it would be in some such way as that described by James that it would fail. But, at any rate, as Hegel said, darkness is not a form of light; and bankruptcy is hardly a form of business. The universe may be a hopeless tangle; but even a pragmatist can hardly accept such a view for its own sake, as a result to rest in. The human mind is at least bound to hope, so long as there is the faintest possibility of such a result, that the world may prove intelligible in the end. It is the glory of such a writer as Caird that he could claim, like the poet, to be

> One who never turned his back, but marched breast-forward,
> Never doubted clouds would break.

This may be a large faith—indeed, it certainly is a large faith—almost too large for human nature to hold by with any steadiness. But pragmatists seem to pride themselves in the strength of their faith. Why should they turn back at the first rebuff? If they choose to say that the idealists only 'will to believe' that the universe must be in the end intelligible, this would not be an altogether untrue way of putting it. But it may be doubted whether a thinking being can really will to believe anything else. Even the most pragmatic of pragmatists does, in the end, after all, try to give some more or less intelligible account of the nature of reality. It is only a question of the degree of strenuousness with which the effort is persisted in. In this sense, I cannot but think that Caird was a more faithful pragmatist than the pragmatists themselves, just as he was also a more thorough realist than the realists.

These necessarily very summary remarks must suffice as an indication of what I believe to have been Caird's fundamental position in philosophy, and of the grounds on which it may be defended, especially against some of the most recent attacks. It seems desirable, however, to add a few brief notes on what may be broadly described as the practical applications of his philosophy. On these also there have been some recent criticisms; and it is worth while at least to try to remove certain misunderstandings. It is significant that the criticisms on the more practical side, as well as on the more purely theoretical one, have tended to be directed with almost

equal strength from opposite quarters. Just as, on the theoretical side, the idealistic position is assailed both from the point of view of realism and from that of subjectivism; so, on the more practical side, it is attacked both as being too radical and as being too reactionary. In both cases this fact may be taken as at least affording some slight presumption that a reasonable *via media* has been found. But it is clear, I think, on the theoretical side, that such a mediating solution has not been found by anything of the nature of a compromise, but rather by pressing fundamental principles to their strictest logical outcome. I wish to urge that this is on the whole true on the practical side as well. In urging this, I may refer first to Caird's attitude towards popular religion, and afterwards to his attitude towards social and political problems. In neither case can I do much more than touch upon the subject; but this is the less to be regretted in view of the admirable manner in which these aspects of Caird's philosophy have recently been handled by Prof. Henry Jones in his series of lectures on *Idealism as a Practical Creed.*

It is certainly at first sight startling to find such a writer as Caird, a trained representative of modern critical thought, concerning himself so directly with the study of theology. The tendency among our modern 'intellectuals' is no doubt rather, as in the case of George Meredith, to think of religion as a sort of spiritual measles that some people catch at certain periods in their lives, or, at the best, as a help to the policeman; and of theology as a mediæval form of sophistry which has only an antiquarian interest. Others tend to connect them with occult phenomena and abnormal states of consciousness. It was certainly not in any of these ways that they were regarded by Caird. He took but little interest in the abnormal—differing in this, to some extent, from his master Hegel. He regarded religion as a quite normal and healthy attitude of the human mind, and theology (with Aristotle) as the coping-stone of the sciences. Some have been apt to suppose, in consequence of this, that he could not have fully caught the spirit of modern enlightenment. Yet, on the other hand, it is equally true to say that his theological views have been regarded with a good deal of suspicion by the accredited representatives of that subject. The fact of his standing between these two fires has led some to think of him as the upholder of a kind of compromise or adjustment, perhaps even of a more or less insincere adaptation to current opinions. If, however, the view that I have sought to give of Caird's fundamental metaphysical principles is correct, it must be apparent that there

is no real foundation for any such suspicion. His theory of reality had a real kinship with Christian theology, especially with the Christian conception of the Trinity; and, indeed, his work in theology was largely directed to showing that it was on philosophical grounds that this doctrine came to be introduced into the Christian tradition. On the more ethical side also he conceived that the most central idea of Christianity is that of 'self-realisation through self-sacrifice,' and that this does truly sum up not only the deepest conception of morality but also the essential nature of spiritual being, and consequently the essential nature of the universe. He believed further, if I understand him rightly, that the general attitude of the founder of Christianity expressed, in the most definite form, the recognition of human life as containing within itself the divine principle of the universe. This recognition had no doubt been given in a manner that was personal and prophetic rather than philosophical; but I think Caird believed that it is in the former rather than in the latter way that it can best be brought home to the consciousness of mankind in general. Men learn, he thought, by pictures and by mythology before they are able to appropriate general conceptions. Perception and imagination are necessarily prior to pure thought. If Caird erred in adopting this essentially Platonic view, it is at least noteworthy that even the leader of the ethical movement in this country, who will hardly be suspected of any undue sympathy with theological traditions, or of any undue tendency to accept practical compromises, has recently been led to recognise the ethical importance of a large part of the Christian ritual; though in his case the philosophical basis for its interpretation is obviously much less readily available. Yet I hardly think that Caird would ever have gone as far in this direction as Dr. Coit has done; and, apart from the points here referred to, it can hardly be maintained that he ever represented his views as having any specially close connexion with current creeds. He always made it apparent that his view of religion owed fully as much to Plato and to Goethe as it did to Paul or Augustine. He looked forward, I think, to the time, and was seeking to prepare the way for it, when religion would rest upon a thoroughly rational basis, and would be seen to be the natural crown of human thought, feeling, and action —when it would be recognised that all the deepest philosophy is theological, all the highest morality religious, and all the finest art a kind of ritual.

His attitude towards social progress has also, I think, been in some respects misconceived. Some have recognised his

genuine zeal for political and social reform, but have tended to think of it as a thing apart from his general philosophical teaching, and have often expressed regret for such activities, as if an attitude of more aloofness from the practical problems of the time would have been more consonant with the calm of a philosopher and with the dignity of the head of an important College. On the other hand, he has also been, directly or indirectly, criticised as one not sufficiently zealous in the cause of reform; and it has even been suggested that his philosophical views, by representing this world as the best that is possible, tended to discourage the reforming spirit. In this last view at least it is pretty safe to say that there is a profound misunderstanding. Caird's view was certainly not that the world as it stands is the best possible, but rather the very different doctrine—surely in itself an inspiring faith—that it can and will be made so. Such a faith is not lightly held. An optimism like that of Caird (or like that of Browning) can only be won through struggle. The surface appearance of things does not support it. It may no doubt be used, as most faiths can, by those who do not really grasp its significance, as a means of stifling effort. But, in any real and intelligent sense, it can only be held by one who is doing his utmost to make it true. 'The unlit lamp and the ungirt loin' are assuredly not the natural concomitants of such a creed. No man can really believe the universe to be the expression of a divine purpose unless he is himself, to the best of his capacity, expressing such a purpose throughout his life. In this sense the doctrine of modern psychologists is certainly true, that we can only believe what we act on. Such a view as that of Caird would be little more than a form of words to any one who was not an active fighter for what he saw to be best. In himself there was assuredly no such opposition between creed and conduct. His wisdom was indeed not of the kind that cries out in the streets; but he was always on the side of progress (as Green also was), and, wherever he saw that he could be of real service, his help was neither tardy nor weak. Hardly Mazzini himself was a more sincere friend of God and the people. And surely if such divine fire may fittingly show itself in man, it may be permitted to display itself even in the head of an Oxford College.

In this paper I have sought to fulfil my task as a defender of the philosophy of Caird, both in its theoretical and in its more practical aspects. Of course it needs no such support. *Non tali auxilio nec defensoribus istis.* His own writings are his best interpreters; and indeed one feels it to be almost a

desecration even to commend a master of such a type. For he had something of the impersonal and cosmic quality that we associate with the most perfect teachers. He seemed to speak as the representative of all the sages, rather than as a man with an individual message. Yet I would not have it thought that I wish to set him on any superhuman pedestal. He would have been the last to seek such an exaltation. He was well aware of his own limitations. One can hardly claim for him the supreme kind of originality. He was an interpreter rather than a creator. His philosophy was of course in its main features Hegelian. If he did not always very directly connect his teaching with that of Hegel, this was not in the main due to any sense of divergence, but rather to his desire not to raise fruitless controversies as to what Hegel's exact meaning was. In this he was probably wise. It may be more open to question whether the exposition of his philosophical ideas did not suffer somewhat from the very intimate way in which he connected them with the criticism of Kant. Adamson once remarked that he probably did not fully realise how big a hole he had made in the system of Kant. I think he did realise it; but some will always regret that he did not set himself rather more directly to the exposition of the views to which he had himself been led, instead of to the interpretation and criticism of others. He might then have dealt more specifically with some of the difficulties that are felt as still remaining in the view to which he leads us—such as those with respect to the reality of time, the nature of evil, the relation between the finite and the infinite, and similar problems. The great value of the work recently done by Mr. Bradley and others, in their more direct handling of such problems, was fully appreciated by him, even if he could not always agree either with their methods or with their conclusions. But it should be remembered that it was his main business to introduce what was almost a new way of thinking to English readers; and even his enemies allow that in this at least he was successful. Those who complain of the thinness of its results should bear in mind what a young and tender plant our British idealism still is. It may be trusted to thicken with its growth. It was inevitable that, in its first beginnings, it should be mainly occupied with problems that may be broadly described as logical or epistemological, rather than with the more concrete cosmological constructions. But there is good ground for believing that these also will in due time have their turn. Caird, who (like Kant) was one of the most modest of men, was well aware that much remained to be done. On a memorable

occasion, when he was presented with his portrait in the University of Glasgow by some of his friends and admirers, he quoted with reference to his own work the lines—

> Wo immer müde Fechter
> Sinken im muthigen Strauss,
> Es kommen neue Geschlechter
> Und kämpfen es ehrlich aus.

His pupils have no reason to be ashamed of his work; but they will undoubtedly have some reason to be ashamed of their own if they do not advance to a more definite treatment of the difficulties that are left in it. In the meantime it may perhaps be pardoned at least to the loyalty of an old pupil, to regard him as the St. Peter of our idealistic movement. It is on that rock, I think, that we must build—I will not say 'the walls of Jericho,' but rather our new Jerusalem.

III.—THE PROBLEM OF INDUCTION AND THE DOCTRINE OF FORMAL CAUSE.

By W. J. Roberts.

By the problem of induction I mean the problem of generalisation, the question, namely, of inference from a limited number of observed instances to all possible instances, or from facts to universal laws by which we suppose those facts to be determined. We may very conveniently also call our problem the problem of the passage from *is* to *must be*. "How," writes Prof. Case, "from some particulars of experience do we infer all universally? The answer to this question is still a *desideratum* of logic."[1] I could not unreservedly subscribe to the opinion that modern inquirers have thrown no light on this central problem; indeed, the main suggestions which I shall make have already been offered, from various points of view and with variations of emphasis, by Lachelier and Janet in France, and by Venn and Hobhouse in England. My opinion is, however, that a great part of what is offered in modern manuals and elsewhere as a treatment of induction is not only unsound in itself, but, what is more important for my present purpose, confusing and misleading with regard to what all will agree to be a fundamental problem, whether or not it is allowed to constitute the whole problem of induction.

Among the advantages commonly claimed for the modern, as against the Aristotelian or scholastic logic, we find two in particular, which writers on logic are apt to connect closely with each other. The first claim is, that modern philosophy has elaborated a clarified and intelligible notion of cause, for which it is indebted in the first instance to the epoch-making speculations of Hume and Kant; the second is, that only in modern times has the inductive process been duly recognised and rightly explained. The second advantage is often, more or less explicitly, asserted to be due to the first. My object in this paper is to seek to establish another view of the re-

[1] *Encyclopædia Britannica*, vol. xxx., Art. "Logic," p. 338.

lation of induction to causation; and to contend that the view which I advocate is implied in the Aristotelian doctrine of Formal Cause. The only kind of Causation, I shall maintain, that has any special relation to induction is that which, in my judgment, Aristotle sought to indicate by the name of Formal Causation. If this contention is justified it will follow that the speculations of Hume and Kant, according to which causation is to be resolved into invariable succession (Hume) or into invariable and necessary succession (Kant), and the still further refinements of their followers, have not advanced our comprehension of the problem of Induction.

This last contention is indeed capable of demonstration, independently of the establishment of an alternative theory. But the now traditional doctrines of causation hardly need anything in the way of negative criticism from myself. For, in the first place, the theory which I shall oppose to the prevalent one will constitute, so far as I am concerned, its most effective criticism; and, secondly, the "development" of the notions of Hume and Kant at the hands of their philosophic successors may be viewed as a kind of internal decay of those notions themselves. Many writers on induction, for example, who profess the utmost admiration for Kant and Hume, and who do them the honour of taking their epoch-making speculations as the starting-point of their own discussions of causation, so refine upon these theories as to make them avowedly useless for the explanation of induction, and in their illustrations of inductive reasonings wholly abandon the theories of their masters as well as their own. Mill, for example, at an early stage in his treatment of induction, throws overboard temporal succession as being unessential to the relation of cause and effect, forgetting that he is thus sacrificing the only means which we possess, according to his philosophy, of distinguishing a cause from its effect; further, in describing the inductions of the sciences, he uses freely the language of 'common sense,' with its implications of agency, efficiency, and the like. More recently, Mr. Joseph begins his account of causation with Hume and ends with abandoning temporal succession and reinstating interaction.[1] The doctrine of real efficiency or activity has been maintained against the current views by many thinkers, as, for example, by scholastic writers, and by Martineau, Lotze and Sigwart. Some, again, have contended that the doctrine of causation according to which events at a particular instant are unambiguously determined by previ-

[1] See *Introduction to Logic*, chap. xix., especially note 1 on p. 390.

ous or contemporaneous events, lacks metaphysical cogency,[1] and that it possesses only the virtues of a postulate, justified by the considerable success with which it has been applied to the motions of material bodies. Some are fain to abandon the notions of real power and efficiency, as far as concerns the distributions of motion in 'closed systems,' only to claim their validity the more emphatically for the spontaneous operations of the will. Others again contend that the sum of events at the preceding instant stand in no unique relation of causation to the events at a particular instant, but that, in strictness, every event is equally necessarily connected with every other event, past, present, and future: 'cause' and 'effect,' if we are to attain to a rigorous metaphysical doctrine of causation, must both alike be identified "with the systematic whole of reality".[2]

Philosophers have, however, in general been less emphatic in repudiating the utility for the purpose of induction of the current theories of Causation, than in criticising those notions themselves. But it must be obvious that rigorous epistemological or metaphysical doctrines, according to which particular events or the whole sum of events at a particular instant are unambiguously determined by the whole sum of preceding events, avail nothing for the explanation of the logical process according to which *particular events*, when it is events that are in question, are attached *to particular events or things* as their causes; and not less obvious is the uselessness for this purpose of the most rigorous doctrine of all, that every particular event or thing is determined by everything in the universe, past, present, future and eternal. This is fully recognised and argued with great skill and clearness by Prof. Taylor.[3] According to this writer, the metaphysical doctrine of Ground and Consequent, by which he means the rigid determination of every particular event or thing by the whole system of reality, is evidently true, but wholly useless for practical life or experimental science; while the principle of inductive reasoning with its assumptions of the plurality of causes, of the possibility of isolating particular events from the rest of the universe, is as obviously false as it is obviously indispensable for practice and for science. Again, what warrant have we for supposing that antecedents and consequents exactly similar are ever repeated? In strict theory, therefore, particular laws of nature

[1] This view is, of course, implied in some of Kant's doctrines.

[2] See A. E. Taylor, *Elements of Metaphysics*, p. 183, and the whole chapter.

[3] *Elements of Metaphysics*, book ii., chap. v.

cannot be established on the basis of a rigidly determined system of nature.[1] The law of universal causation, in short, as understood by the modern followers of Kant and Hume, does not enable or help us to perform a single act of inductive reasoning.

Returning to our main subject, we may notice that many of our inductive reasonings have no reference to *efficient causation*, whether we abide by the popular sense of that expression, or prefer the explanations of Hume and Kant. Mathematical theorems are often suggested, in the first instance, by a process which every one would call inductive. This was probably the case, for example, with the theorem of Pythagoras (*Euc.* i. 47).[2] Fermat's diverse propositions relating to prime numbers were all thus suggested. One of them ($a^{p-1} - 1 =$ a multiple of p, when p is a prime number and a prime to p) was subsequently confirmed by rigorous mathematical deduction; others, as was shown through their being overthrown by a contradictory instance, did not admit of such confirmation.[3] The reasoning implied must have been the following: "in the large number of instances which I have investigated, I have always found that this result holds good, and I have not met any instance which failed to yield this result; I therefore am justified in assuming that there must be some necessary relation between the expression in question and the predicate which I find attached to it in so many cases, though I cannot establish this relation by strict reasoning". This reasoning, as I shall explain below, possesses the only characteristic by which induction can reasonably be opposed to deduction. But these inductions were not inductions of efficient causation in any sense of that term. So likewise such inductions as result in the propositions "lightning is always (= must always be) followed by thunder," "all men are mortal," "all gold is yellow," contain no reference to efficient causation, in the popular, or in any refined philosophical sense of that name.

It should also be observed that, in ordinary discourse, 'cause' and 'effect' are not always used as correlatives, though the language of logicians often implies the contrary. *Cause* is a word of much wider range than *effect*. Popular usage may not be quite strict; but we may say, I think, that the word 'effect,' as etymological considerations would suggest, is properly used as the correlative of 'efficient cause'

[1] *Cf.* Venn, *Empirical Logic* (2nd ed.), pp. 97 ff.

[2] See Hobhouse, *Theory of Knowledge*, pp. 436-437 with footnote.

[3] Such were the theorems '$2^{2^x} + 1$ = a prime number,' and '$x^2 + x + 41$ = a prime number,' x being any real positive integer.

only. Thus certain properties of geometrical figures are regarded as depending upon other properties—the essential or fundamental properties—as their causes; but a property is not spoken of as an effect of the nature of the figure. A man's actions are often referred to his character as their cause, but it would be awkward, to say the least, to view his actions as effects of his character. The fortunes of the so-called Law of Sufficient Reason bear witness to my contention; for while philosophers speak of a Law of Ground and Consequence, the popular correlative of Consequence is not *Ground* but *Cause*. Lastly, purposes or 'Ends' are without any sense of paradox spoken of as causes of events or arrangements, though it would seem violently paradoxical to speak of these events or arrangements as effects of the purposes. Indeed, Aristotle's doctrine of Final Cause is generally recognised to be in harmony with a very common and, as some would contend, with the most tenable philosophic use of the term Cause.

For all this, men will probably be reluctant to abandon the notion that induction, as such, has to do with causation; and I hope to show that this reluctance is justified by a still prevalent use of the term cause, and that this is the use which Aristotle had in view when he taught that in one sense of the word the Form or the Universal is a cause. Now while the practice of common men and of many philosophers is recognised as not having seriously diverged from the usage to which the Aristotelian doctrines of Final and Efficient Causation bear witness, it is supposed to be otherwise with his doctrines of Formal and Material Causation. The meagre and technical explanations of Formal Cause, in particular, found in modern manuals of scholastic metaphysics[1] are not likely to inspire interest in the doctrine or confidence in its possibilities. To regard this particular Aristotelian doctrine as an esoteric idiosyncrasy of the master's metaphysics would not be in harmony with what we know of the tendency of his philosophy to keep in close touch with popular and scientific habits of thought. I would suggest that this doctrine of Formal Cause, in spite of its peculiar technical vesture of phrase, is an intelligible account of a kind of explanation, of a possible answer to the question 'why?'—which answer is as prevalent in our day as it was in the time of Aristotle.

The doctrine of Formal Cause is in truth only another expression for the fact that generalisation, or the assigning

[1] *E.g.* Rickaby, *General Metaphysics*, pp. 300-302.

of phenomena to classes or kinds, is a kind of explanation. Let us take Aristotle's instance of the marble statue. We might ask, 'Why is that piece of marble a statue?' and we might receive the answer that it is a statue because it possesses the universal or specific characteristics of a statue. It is these characteristics which, in their way, account for its being what it is, as opposed to a mere block of marble. Again, the form or universal determines, not efficiently, but after the manner of a law or type, the details of the particular. The block of marble has this or that feature of the human shape because it is a statue and it is the nature of a statue to represent the detailed shape of human beings. The fact that in some cases other kinds of explanation, such as the assignment of efficient or final causes, are available does not destroy the utility of explanation by type or law.

That generalisation is at the same time explanation is argued explicitly and with much detail by Dr. Venn, from whom I will quote the following passage:—[1]

"'Why is it difficult to walk on ice?'—the spontaneous answer of the schoolroom or drawing-room will be, 'Because ice is slippery'. This is an explanation, though not the best we can obtain. The answer removes the experience in question from the awkward and dangerous category of isolated facts. The ice is thereby classed with muddy pavements, polished floors, smooth marble steps, and so forth. A slight advance has been made towards the great aim of all rational treatment of nature, by classing a number of different things according to their resemblances and relegating the new fact to its appropriate class."

Venn points out, moreover, that all explanation, however detailed, only goes a certain way, and that it issues finally in what we may call explanation by generalisation. A complex phenomenon may perhaps be explained solely by the law of gravitation; but the law of gravitation itself is only a generalisation of very wide range, not otherwise differing from the proposition 'Opium has a soporific property'

"The action of the village pump is a case in point. The village workman is not so perplexed by it as to ask why it acts, though some of his early predecessors must pretty certainly have put such a question. It always does bring up the water, and that is (quite justly) enough for his purpose; the utmost length he is likely to go is to help himself out by a word, as we are all apt to do, and to account for the water rising by the fact that 'it is sucked up'; even this, it is evi-

[1] Venn, *Empirical Logic* (2nd ed.), p. 499.

dent, involving a certain amount of generalisation. The scientific man, starting with this explanation or law, explains it by analysing it into its component elements. He shows that the pressure upwards on the column of water in the tube is assigned by the weight of the whole column of air of the same diameter as the tube, and the pressure downwards is assigned by the weight of water in the tube. . . . So far as this explanation goes,—and like all explanation it only professes to go a certain way,—it completely answers our purpose. It analyses the already generalised phenomenon into its component elements." [1]

We therefore come finally, in the process of explanation, to generalisations or laws not themselves explicable, which constitute at a given state of our knowledge our ultimate explanations of less general laws and of particular facts.

The essence of induction or generalisation consists in the fact that in inductive reasoning the universal proposition depends, as on its *causa cognoscendi*, on the particulars, while the particulars depend upon the universal as their *causa essendi*. Our discussion will, I hope, help us to understand how this can be so, and thus to resolve the difficulties which have given rise to so much controversy as, for example, between Mill on the one hand and Whewell on the other. Mill, like ourselves, supposed that the essential element in induction was generalisation or inference from some to all; Whewell in many parts of his writings ignores generalisation wholly, and speaks as if induction consisted merely in finding more general principles from which the particulars could be deduced. Mill is surely right when he contends that the universal proposition is the conclusion of the inductive inference; and inductive inferences must be recognised as a special source of universal propositions because in them the conclusion is not forced upon us through its being implied in known universal propositions, from which it can be deductively inferred, but by an implicit or explicit conviction that the particular instances would not exhibit certain characteristics, such as unfailing regularity, unless they were determined by some special law, which accordingly we express as our conclusion. Thus it comes that we consider the universal conclusion to be inferred from the particulars; for it is the peculiar character of the particulars which leads us to explain them not as 'accidental' combinations but as determined by a special law which requires this collocation and admits of no other.

Among the peculiar features, which serve to elicit this belief

[1] Venn, *op. cit.*, pp. 508-509.

in special universal laws, regularity or invariability seems to be one of the most important. In regard to this point, I consider Mill to be more nearly right than many modern logicians, who, eager to destroy every distinction between deduction and induction, assign to repetition only the subordinate function of facilitating "analysis". That this last is not the only service which repetition performs for us will be evident from the following considerations. We are in fact often prepared to concede that one instance of a particular combination might be due to 'accident'; but we find it more and more difficult to allow this as the number of instances increases. Let us suppose a person not to know that a charge of murder cannot legally be tried by a court of quarter sessions, and suppose him to observe that, at a particular sitting of such a court, no case of murder is investigated. He would probably not feel himself warranted to infer that this court has no power to try such cases. But if he examines the records of one quarter sessions after another, and finds that murder cases are absent from them all, he will now feel himself justified in passing from *is* to *must* and inferring that, in all probability, cases of murder *cannot* be tried at quarter sessions: if they could, he will say, it is very strange that my investigations have not brought to my notice a single instance of such an event.

Such reasonings are of course not rigorous deductions from absolutely certain premisses. If indeed induction proceeded on principles which could be exhibited as self-evident, as some thinkers consider the dependence of every event upon an irrefragable cosmic order to be, then our inductive conclusions would also be absolutely certain. But it is notorious that even our best-established inductive conclusions lack complete metaphysical certitude. Such reasonings do, however, in varying degrees possess the evidence of probability. And this kind of evidence is also enjoyed by the principle involved in such inductive generalisations as I have described. A second illustration may perhaps make this point still clearer.

Let us take the case of the properties of a chemical element, say gold. We may fairly assume that no one possesses complete insight into the mutual dependence of these properties on one another. We cannot understand and explain why there should not be a substance otherwise resembling gold, but differing from it solely in colour; whereas in the case of certain mathematical theorems which we have proved, we do possess this insight. Our conviction that 'All gold is yellow' (*i.e.* 'gold must necessarily be yellow') is based

upon induction and not upon demonstration from known truths or upon insight into the inherent incompatibility of the remaining qualities of gold with a quality other than yellow. But we consider the contradiction which experience supplies to the supposition of gold which is not yellow to be practically almost as strong as insight into its impossibility. The constant concurrence of the yellow colour with the other qualities of gold suggests to us so strongly that the colour and the other qualities are connected with each other by some necessary bond, that we feel ourselves absolved even from considering the possibility of a different combination; and this though we do not pretend to understand the nature of the necessary connexion concerned. The observed concurrence and the absence of any contradictory instance suggests to us, in fact, that the combination of the other qualities of gold with a different colour is not even possible.

A strong conviction of necessity seems, however, to be elicited by circumstances of observed instances, other than regular concurrence. Such a circumstance appears to be the instantaneous or speedy concomitance or succession of two or more extraordinary changes. I am disposed to think that a person noticing for the first time an instance of lightning followed by thunder would find it very difficult if not impossible to entertain the suggestion of mere coincidence. He would reject this suggestion, assuredly not from a cosmical conviction of the general interdependence of things, but from an explicit or implicit conviction that two such extraordinary events, so closely connected with each other in experience, could not fail to be related in some special 'causal' way with each other.

The mention of coincidence will recall to the mind the Aristotelian *συμβεβηκός*, which, as is known, is opposed by Aristotle to that which is universal or specific. It does not necessarily imply any belief in the possibility of chance or caprice in the universe; it recognises only that we do in fact distinguish coincidences from things which we know or suppose to stand in some universal relation to each other. Two things are held merely to coincide with each other when we know of no law which enables us, directly or indirectly, to attach those things to each other universally, or when their concurrence is not, by reason of frequency or some other circumstance, such as to suggest any such universal relation. Let A and B be two facts which in a given instance stand in a certain relation of concomitance or sequence: even though we may be convinced that both A and B are in that instance necessarily in that relation, and

even that the cosmic order would not in that instance have admitted any other combination, we should still regard the combination as accidental, unless we could prove or find grounds for presuming some universally necessary relation between A and B. If, on the basis of the regularity or of some other feature of the conjunction, we do presume such a relation, we thereby reason inductively.

It is not always sufficiently recognised that our intellectual operations proceed in great part instinctively, without advertence to the rational and intelligible principles involved in them. We reason deductively without advertence to the rules of the syllogism, or even to the fact that we are reasoning at all. In like manner we reason inductively without consciously using any such principle as the Law of Causation, the Uniformity of Nature, or the determination of particular instances by universal laws. We may even go farther and say that results equivalent to the results of reasoning processes come into being without conscious reasoning, but through the harmonious operation of our organisation, bodily and mental. The early stages of conscious life can be understood only on this hypothesis; but these processes also characterise much of our mature mental life.

This consideration will enable us to understand why Aristotle gives the name induction in several passages of his works to what is not a consciously performed intellectual act, but is nothing other than the extraction of the universal or the species from the data of sense and imagination.[1] Remembering that the form or universal is a cause, we may say that the rational principle in accordance with which this process takes place is the principle that the particulars are determined by the universal or species; but there is no advertence to this principle in the process nor even any conscious intellectual operation. It is in this sense of the word that the first principles of all the sciences, including the mathematical, are said by Aristotle to be ascertained by induction.[2]

We shall find the same principle implied though not explicitly formulated in the only formal reasoning process to which Aristotle gives the name induction. This is the

[1] See, for an account of Aristotle's use of the word induction, Joseph, *An Introduction to Logic*, chap. xviii. I am much indebted, in respect of this and the following paragraphs, to Mr. Joseph's erudite and lucid discussion.

[2] *Cf. e.g.* Arist. *Eth. Nic.* (Eud.), vi., 2, §3, ἡ μὲν δὴ ἐπαγωγὴ ἀρχή ἐστι τοῦ καθόλου, ὁ δὲ συλλογισμὸς ἐκ τῶν καθόλου· εἰσὶν ἄρα ἀρχαὶ ἐξ ὧν ὁ συλλογισμός· ἐπαγωγὴ ἄρα.

reasoning known in modern times as Perfect Induction, which friends and foes of the Aristotelian tradition have succeeded in making so ridiculous. Jevons is indeed fain to concede that though there may be no genuine reasoning process involved in passing from 'January, February, March, etc., have less than thirty-two days' to 'All the months have less than thirty-two days,' the second is a very convenient summing up of the information contained in the first. Students of logic are indebted to Mr. Joseph for his vindication of this mode of reasoning.[1] As explained by Aristotle, who, however, made the mistake of trying to represent it as a syllogism, and still more clearly as illustrated by Mr. Joseph from mathematics, the process not only deserves to be recognised as reasoning but has strong claims to be called inductive. Aristotle's particulars, in fact, are not individuals but species, and the reasoning consists in attaching to the genus a property found in all its species: thus, to take Aristotle's own example—

The animals man, horse, mule, etc., are long-lived:

The animals man, horse, mule, etc., are (all the) gall-less animals:

Therefore all gall-less animals are long-lived.

It is clearly a step forward to attach a property to a genus, which might formerly only have been noticed to belong to this or that species of the genus. The result of the reasoning is to establish a presumption that longevity is causally or necessarily connected with the absence of gall.[2] It is easy to see that this mode of proof is, in an essential feature, very closely related to inductive reasoning from some instances or imperfect induction as above explained. For the property (longevity) is attached to the genus (gall-less animals), not because it is directly seen or understood necessarily to belong to it, nor because it is seen to be implied in the other properties of gall-less animals, but because some necessary connexion is suggested by the fact that all the species exhibit this property. The force of the reasoning can be represented by throwing it into the form of a question: 'if the absence of gall is not causally connected with longevity, how comes it that no species of gall-less animal can be found which is not long-lived?'

Of course the argument is not stringent and the conclusion is only probable: it is, for one thing, not secure, any

[1] *Op. cit.*, pp. 351-354; see also p. 503.

[2] *Cf.* Joseph, *op. cit.*, p. 352, "in Aristotle's own example where longevity is proved of gall-less animals by means of man, horse, mule . . . it is supposed that the absence of gall is the cause of longevity".

more than other inductive generalisations, against the suggestion of 'plurality of causes'. But in mathematics we may sometimes be sure that the species enumerated are not the only known species of the genus, but that they are its only possible species. "A proposition may be proved independently of a right-angled, an obtuse-angled, and an acute-angled triangle, and therefore enunciated of the triangle universally; or of the hyperbola, the parabola, and the ellipse, and therefore enunciated of all conic sections. . . . The peculiar nature of our subject-matter in mathematics enables us to see in each case that no other alternatives are possible within the genus than those which we have considered; and therefore we can be sure that our induction is 'perfect'. The nature of our subject-matter further assures us that it can be by no accident that every species of the genus exhibits the same property; and therefore our conclusion is a genuinely universal judgment about the genus, and not a mere enumerative judgment about its species. We are sure that a general ground exists, although we have not found the proof by it . . . " (Joseph).

The last sentence quoted expresses our justification for regarding this mode of reasoning as inductive: theoretically, in spite of the stringency of this conclusion, the reasoning is inferior to a deduction which would show directly that the property belongs to the triangle or the conic section as such.

What modern students of logic are most likely to miss in Aristotle are, first, a discussion of the validity of generalisation from the individual instance to the species or law, and, second, a number of criteria for testing generalisations or inductions, such as Mill supplies, for example, in his methods of experimental inquiry.

As to the first point, I have endeavoured to show in this paper what Aristotle's answer would or ought to have been had he addressed himself to the discussion of this problem. What he had to say on the second head is in part preserved in the *Topics*, in which he discusses among other matters some tests of valid generalisation.[1] The *Topics* deals with Dialectic or with the principles of debate, the parties to which do not claim or require detailed scientific knowledge. The educated man may aspire to criticise the first principles or the arguments of the scientist without detailed knowledge of the scientist's special subject-matter. Certain principles "hold good in any science". "A man therefore whose

[1] See Joseph, *op. cit.*, pp. 358-363.

mind is stocked with principles of this kind has points of vantage, as it were, from which he may proceed to attack or defend any definition, any predication of a property; they are topics in common, 'common-places,' points of view whence you may approach to the consideration of the statements of any science. Just as a man who knows nothing of the truth of its premisses may be able to detect a flaw in a syllogism, so the dialectician, without a scientific knowledge of a subject, may know what sort of questions to ask if he wishes to test a scientific man's right to affirm the principles he enunciates." [1]

Inductive reasoning in the modern sense of the word provides abundant scope for dialectical principles. One of these would be, for example, the so-called 'plurality of causes'. A scientist may have satisfied himself, by the 'method of difference,' that a certain effect (x) was in the experiments performed by himself produced through the introduction of a certain agent (A). The dialectician might remind him that though his experiments may prove that A is capable of producing x, they do not prove that this power is possessed by A alone. Again, in so far as Mill's experimental methods are 'methods of elimination' they may be used for the purposes of the purely critical and negative dialectics of the layman. Deriving his facts from his opponent's books, for example, he might argue, "B and C cannot be the causes of x, because they are present when x is absent, as well as when x is present" (Method of Difference); or "B and C cannot be the causes of x, because they are absent when x is present, as well as present in certain cases of x" (Method of Agreement). It may be remarked that Aristotle notices the principle of concomitant variations as a topic or common-place applicable to the question whether a property belongs or does not belong to a subject. Moreover, he applies it not only negatively but positively: not only does the absence of concomitant variation justify us in refusing to attach a predicate to a subject as its property, but the presence of such variation is a positive ground for the generalisation.[2] As I have already indicated, I do not consider the methods of Mill to be *mere* methods of eliminating suggested causal connexions; for I have recognised repetition,

[1] Joseph, *op. cit.*, pp. 361-362.

[2] See Joseph, p. 362, for the τόπος ἐκ τοῦ μᾶλλον καὶ ἧττον. "That is not a property of a subject which does not increase or decrease with an increase or decrease in the subject, and conversely, if you find two things increasing and decreasing together, you may assert such connexion between them."

for example, as one of the circumstances which reasonably and as a matter of fact elicit generalisation. But, in so far as they are employed for purposes of criticism only, and not for the advancement of positive knowledge, they belong to the dialectical side of logic, and might as such have reasonably found a place in the *Topics* of Aristotle.

The *Topics*, however, do not supply an adequate logic of induction; and it would be idle to seek to deny the furtherance which the comprehension of the actual methods of science has received from the investigations of Bacon and his followers. The advance of positive knowledge in modern times has greatly enhanced the possibilities and responsibilities of logic and philosophy. For all this, the mastery possessed by Aristotle over a small extent of knowledge may well have enabled him to penetrate more surely than later thinkers to the logical principles involved in the sciences which he knew. He was in less danger than the modern philosopher of failing to see the wood for the trees. And I have contended throughout this paper that, in spite of the recognised inadequacy of his treatment of induction, Aristotle was able to keep himself in close contact with the essential nature of the inductive process; and I hope to have shown that his meagre statements on this subject, together with his metaphysical doctrine that *the form or, as we should say, the law is a cause*, enable us to reconstruct from his writings a theory of inductive inference which is fitted to make the process appear intelligible and reasonable.

Something will have been gained, moreover, if I have succeeded in doing something towards vindicating the true meaning of the despised doctrine of Formal Cause, and thus in tracing another and little recognised point of affinity between the thought of Aristotle and that of our own age.

IV.—THE ETHICAL SIGNIFICANCE OF THE IDEA THEORY (I.).

By R. M. MacIver.

The Idea theory of Plato when it has not been reduced to a mere logical doctrine faultily expressed has generally been regarded as the strange aberration of a mind dominated by abstract notions. The value and the meaning of the theory has been greatly obscured in consequence. We generally approach the theory from the logical side, and forget that Plato was from first to last, from the *Laches* to the *Laws*, primarily an ethical thinker. To ethical thought a fact finds its explanation not in its relation to a system of efficient causes but in its relation to a culminating purpose. Plato's thought is fundamentally teleological: and if we approach it from the ethical point of view most of the difficulties vanish which are thought to beset it, and in particular the Idea theory reveals itself as the first really masterly attempt to solve the ultimate problem of philosophy. In this and a succeeding paper I shall attempt to show how a perception of the fundamentally ethical quality of Plato's thought explains the rise, the development, and the modification of his Idea theory.

Everyone must grant that a teleological explanation, when and if possible, is the fullest and ultimate explanation. The only causes we can really be said to know are the final causes of our own conscious activity. As soon as we pass from final to efficient causes our difficulties begin, for we have to ask—and cannot answer—how the final cause is itself the efficient cause of the first member in the chain of efficient causes to which it is prior. Because we thus fail to relate the two principles we can never outside the experience of our own activity deduce the presence of the final from the presence of the efficient cause. No "argument from design" can ever be more than probable, because design itself can never be demonstrated. Hence science whose nature it is to seek certitude will have nothing to do with teleology. It is right for science to reject it, but not to deny the ultimate value of such an explanation were it possible. Where it is possible,

i.e. in the experience of our own activity, it is at once manifestly the fullest explanation. In fact science to secure her partial explanation has to forego forever the full understanding of what she seeks to explain. A fact, and more particularly a process, is only truly known when its relation to a purpose is known, and even a denial of purpose, which equally with its affirmation is beyond science, becomes a form of explanation inasmuch as it is an answer to this necessary question.

It is just the necessary questions beyond the scope of science that philosophy considers, and certainly Plato believed that for knowledge the teleological explanation is ultimate. It is quite mistaken to regard him as a philosopher to whom the ethical is a secondary consideration, to whom "ethics, politics, logic, physics are so many forms of applied metaphysics".[1] On the contrary, the metaphysical theories of his predecessors and the logical concepts he himself helped to develop are rather his instruments or means for the solution of the problem of speculative ethics, poor enough instruments at first for so gifted a mind, but becoming finer and finer in his hands, themselves gradually shaped in the progress of the work they are meant to accomplish.[2] Consider *e.g.* how in the *Meno* the important logical distinction of knowledge and opinion arises out of the ethical question, and is introduced in order to solve it. There seems no reason to regard the ethical starting-point in this and so many other dialogues as merely a literary introduction. If we take it for what it purports to be many difficulties are avoided.

One further presupposition must be made. It is no longer possible to deny a development in Platonic theory from period to period, and therefore to understand it we must presume a certain order of the dialogues. The following chronological facts, which seem sufficiently established, will be here assumed,—(1) that the small "Socratic" dialogues are earliest; (2) that the *Symposium* is earlier than the *Phædo* and that both are earlier than the *Republic;* (3) that the "dialectical" dialogues, *Thæetetus*, *Parmenides*, *Philebus*, *Sophist*, are later than the *Republic;* (4) that the *Timæus* and *Laws* fall in the last period.

Two seemingly inconsistent tendencies are characteristic of deeply ethical natures. (1) They insist on a certain direc-

[1] R. D. Archer-Hind's *Introduction to the Phædo.*

[2] *Cf. Philebus*, 23 C, where in a dialogue that is essentially one of reconstruction Plato talks of "requiring weapons of another make from those he has used before, tho' some of the old ones will do".

tion of one's being, toward the good and away from the evil that is in the world, an insistence on the goodness of the good which derives half its strength of appeal from the implied acknowledgment that evil too is a real thing. (2) Yet they tend ultimately to deny the very existence of evil, and to make the good not only the supreme *ought* but also the absolute *is*. Such a type of mind will at the end of an essentially teleological system come to deny teleology altogether. For purpose, the differentia of the ethical idea, in the necessity for its realisation implies a present imperfection, and, more than imperfection, it implies duality. In religion similarly it would almost seem as if a man can hardly be in earnest about God unless he believe also in the devil. So the ethical system moving, as all systems strive to do, towards monism moves towards self-destruction.

Plato began by making the good *one*, this is the work of the early dialogues,—and then he made it *all*. As a disciple of Socrates he followed the method of concepts, but as a fundamentally ethical thinker he transformed—where too he may simply have followed Socrates—a logical into an ethical ideal. In doing so he took into account only one side of that logical doctrine. It was a method of saving reality in a world where else it would seem that "all things leak like a pot" (*Crat.*, 440 C), and its importance to Plato was that it saved those things which mattered. Plato's first thought was to save the reality of the good, and for the present he was heedless that his method of concepts must preserve equally that of evil also. The ethical claim is primarily for the security of the good: while it must admit the present existence of evil, it denies its right to existence and postulates the possibility of its final annihilation. But the good must be eternal. "The good," said Epicharmus, "is a thing-in-itself."[1]

Plato therefore asked: "Tell me whether there is or is not any absolute beauty or good, or any other absolute existence?" (*Crat.*, 439 C). In putting the question in this form Plato is not thinking merely of the reality and stability assured by a system of concepts. The ethical universal is clearly to him something more than any other. It has an attractiveness for and a claim[2] on the knower of it, making the relation

[1] τό γα
ἀγαθόν τι πρᾶγμ' εἶμεν καθ' αὑθ' : ὅστις δέ κα
εἰδῇ μαθὼν τῆν', ἀγαθὸς ἤδη γίνεται.

[2] The Greeks, more loyal to life than we, preferred to see in the good the attractive rather than the imperative, but both aspects of the ethical idea, its attractiveness and its bindingness, the good as eternal law and the good as eternal source of satisfaction, presuppose this quality of, so to speak, *felt* independence.

between knower and known seem almost reciprocal, implying that they are indeed objects of knowledge, permanent realities answering to the permanence of mind, as distinct from the ever-changing and therefore unknowable objects of sense.

This is the starting-point of the Idea theory of the *Symposium*. Here the good appears under its form of beauty, under the form *i.e.* which reveals most clearly its quality of attractiveness, and to it there answers love, the generic name for all attraction. "There is nothing men love except the good, is there?' 'No, certainly,' I should say, 'there is nothing.' 'Then,' she said, 'it is the simple truth that men love the good" (*Sym.*, 206 A). The important fact is that the good is loved for itself. We desire some things because they fall inside other purposes or schemes—they are rendered attractive because they fit in, a new item of knowledge, for example, that gives completeness to knowledge already possessed—but in contradistinction to these the beautiful or good has an immediate, even abrupt, attraction which gives it a sense of greater objectivity, and it is just this quality which made the Idea theory psychologically possible. No concepts can be simply "creations" of the mind, but ethical concepts least of all.

Once this foothold in reality has been found, logic comes to the aid of the ethical claim. There are logical grounds for regarding these concepts of beauty and goodness as fundamental. It might be said :—

(1) Other universals only cover a part of the nature of that thing to which they are applied. What is white is much else besides that bears no relation to whiteness. But 'beautiful' and 'good' (taking 'beauty' (*καλλος*) in that extended meaning it has in the *Symposium*, as applying to the internal as well as the external nature, so that we can speak of the beauty of holiness or of goodness itself) are concepts which determine the whole nature. So far as they do not it is because there is contradiction in that nature, *i.e.* because it has in it that opposite which is the only limitation of the good. An object may hold not-white attributes without any diminution of its whiteness, but can it hold not-good attributes without having its goodness thereby limited or modified? Just as beauty in its ordinary acceptation comprehends all the external character of an object, so the beauty that is called goodness, if the term is applicable to anything without limitation, must comprehend its whole nature.

And we can go further. Suppose we take any beautiful material thing, a statue or a picture, it might be held that a single particular of that thing, a single feature of the statue,

a ray of light and shade in the picture, is potentially determinant of the whole, so far as that whole is adequate to the conception of beauty. (True, we cannot deduce the whole from the part, but then we have always in these matters to accept approximation and we recognise that our idea of beauty is imperfect no less than the object; as the artistic sense grows, more and more determinations would be ruled out as incongruous, thus suggesting the possibility of one unique perfection.) Given a starting-point of sense, the single conception of beauty may determine what the unity of the whole should be, so that any beautiful object, in so far as that unity is realised in it, is simply a particular embodiment of the one beauty. Its beauty is individual, true, but this individuality can be regarded as simply the limit set on the universal beauty when it is forced to submit to empiric laws, it may be the necessary particular way in which beauty appears under certain conditions of sense. And just as the beauty in all parts of any object is one, so is the beauty of all objects one.

This conception underlies the account in the *Symposium* of the soul's progress towards Beauty, as it moves up from particulars to the Idea. It is really a progress in knowledge, in the knowing of what we are all the time seeking. We desire the thing, the phenomenon, because it is an embodiment of beauty; if we only knew, therefore, it is the beauty manifested through it, the Idea of beauty, that we really desire. We seek without knowledge, not knowing even what it is we seek. This knowledge is the revelation of the Idea, and the nature therein revealed is "beauty absolute, separate, simple, and everlasting, without diminution and without increase, or any change, in which participate the ever-growing and perishing beauties of all other things".[1] Such a nature is not "in the likeness of a face or hands or any other part of the bodily frame, or in any form of speech or knowledge, or existing in any other being, as for example, in an animal, or in heaven or in earth or in any other place". This assertion of the ὑπερουσιότης (to use a scholastic expression) of the good is very important. The essential, primary, Idea is to Plato ὑπερούσιον, above substance, the maker of realities, the disposer of substance. This is no mere hyperbole. Plato's Idea in the *Symposium* is beyond what we mean by substance, and the difficulties of the Idea theory only begin when Ideas cease to be ὑπερούσια.[2]

[1] Here for the sake of accuracy I modify Jowett's translation, which I use for the various quotations from Plato.

[2] Lutoslawski and Shorey maintain that the superiority of the good to substance, *i.e.* material substance, cannot be taken literally, whereas in

(2) We know things partly under concepts which cover —or mean—part of their nature, wholly under those which cover the whole. In fact we can only be said to know a thing in so far as it is comprehended under one concept. But the good appears as the all-comprehensive concept, and therefore the knowledge of the good is the completest knowledge of reality.

In the *Phædo* this point of view has considerably developed. The question raised by Socrates, "Must not true existence be revealed to the soul in thought, if at all?" (*Phædo*, 65 C) is immediately particularised in the form, "Is there or is there not an absolute justice . . . and an absolute beauty and absolute good?" This identification of the good with the true was to carry Plato very far. The ethical motive which at first merely guided in the *direction* of the good, other ways being possible for the soul, now leads step by step to the denial of any reality but that object of study.

At the close of the *Symposium* two ways of development remained open. (1) Plato might have retained the one all-comprehensive Idea. Just as he had found the unity of the virtues in knowledge, so he might have found the unity of knowledge in the good. He might have limited the doctrine to the single Idea of the good, including thereunder whatever can be regarded as giving an absolute value to things, their beauty or desirableness. (2) He might extend the doctrine to include other Ideas than that of the good. Such an extension would weaken the original teleological character of the system, but on the other hand the logical argument for the Idea of good, the argument from universals, held equally for other Ideas. One further type of concepts in particular fascinated Plato, those of mathematical science. Not only did these illustrate excellently the higher perfection of thought-object over sense-object (as Plato had already shown in the *Meno*), a doctrine essential to the Idea theory, but there was also a very important precedent in the number philosophy of the Pythagoreans.

Plato therefore was led to extend the sphere of Ideas, and in the *Phædo* another class of Ideas besides the ethical, *viz.*, the mathematical, make their appearance. It is true that the Ideas of beauty and goodness are still those most insisted

fact this superiority is not only quite intelligible but is necessary for the Platonic scheme ; the concept of good is prior to every other, including that of substance ;—logically substance is prior to attribute, but ethically the comprehensive attribute of good is prior to substance. (We must remember also that Ideas of attributes are no less self-existent than Ideas of substances.) The great source of confusion in the Idea theory is that it does not distinguish logical from ethical presuppositions.

upon; when the question is one as to the nature of reality they remain in the foreground (*cf.* 77 A: "For there is nothing which to my mind is so patent as that beauty, goodness, and the other notions of which you were just now speaking, have a most real and absolute existence"), but those other Ideas begin to claim a place in reality also (*cf.* 78 D), though the difficulties they bring with them have not yet appeared. The Idea of the good is still the principle of explanation, and thus though no longer alone is exalted above all other Ideas.

This is clearly expressed in the famous autobiographical passage of the *Phædo* (97 C *sqq.*), a passage of very great importance for the interpretation of Plato. Unfortunately, this passage itself requires interpretation, more than one view of its meaning being possible. The interpretations generally offered seem to me either logically inconsistent or linguistically unsound, and this must be my excuse for dwelling on this section at some length.

Socrates has been relating his ineffectual attempts to master natural science, the problems of physics and physiology. He declares the subject fascinated and yet bewildered him. All this talk of hot and cold principles controlling growth and decay drove out of his head other and self-evident facts, *e.g.* that growth is in man the result of certain (consciously performed) actions, *viz.* eating and drinking. His bewilderment led him to conclude that he had no natural capacity for this study, and indeed leaving natural science out of the question he found in the most ordinary facts of perception much to perplex him.

"Then I heard some one reading, as he said, from a book of Anaxagoras, that mind was the disposer and cause of all, and I was delighted at this notion, which appeared quite admirable, and I said to myself: If mind is the disposer, mind will dispose all for the best, and put each particular in the best place; and I argued that if any one desired to find out the cause of the generation or destruction or existence of anything, he must find out what state of being or doing or suffering was best for that thing, and therefore a man had only to consider the best for himself and others, and then he would also know the worse, since the same science comprehended both. And I rejoiced to think that I had found in Anaxagoras a teacher of the causes of existence such as I desired, and I imagined that he would tell me first whether the earth is flat or round; and whichever was true, he would proceed to explain the cause and the necessity of this being so, and then he would teach me the nature of the best, and show that this was best; and if he said that the earth was in the

centre, he would further explain that this position was for the best, and I should be satisfied with the explanation given, and not want any other sort of cause" (97 C-E).

Of this hope he was sadly disappointed on examining the system of Anaxagoras. That philosopher forsook mind altogether, and instead of explaining the reason that is in things if mind has ordered and disposed them, he had "recourse to air, and ether, and water, and other eccentricities". Anaxagoras like the rest failed to distinguish cause (*τὸ αἴτιον τῷ ὄντι*) from condition (*ἐκεῖνο ἄνευ οὗ τὸ αἴτιον οὐκ ἄν ποτ' εἴη αἴτιον*). "And thus one man makes a vortex all round, and steadies the earth by the heaven; another gives the air as a support to the earth, which is a sort of broad trough. Any power which in arranging them as they are arranges them for the best never enters into their minds; and instead of finding any superior strength in it, they rather expect to discover another Atlas of the world who is stronger and more everlasting and more containing than the good; of the obligatory and containing power of the good they think nothing; and yet this is the principle which I would fain learn if any one would teach me" (99 B).

Socrates himself has also failed in this pursuit, and has had to follow a second-best method (*τὸν δεύτερον πλοῦν*). This is explained in the following passage: *ἔδοξε τοίνυν μοι μετὰ ταῦτα, ἐπειδὴ ἀπείρηκα τὰ ὄντα σκοπῶν, δεῖν εὐλαβηθῆναι, μὴ πάθοιμι, ὅπερ οἱ τὸν ἥλιον ἐκλείποντα θεωροῦντες καὶ σκοπούμενοι· διαφθείρονται γάρ που ἔνιοι τὰ ὄμματα, ἐὰν μὴ ἐν ὕδατι ἢ τινι τοιούτῳ σκοπῶνται τὴν εἰκόνα αὐτοῦ. τοιοῦτόν τι καὶ ἐγὼ διενοήθην, καὶ ἔδεισα, μὴ παντάπασι τὴν ψυχὴν τυφλωθείην βλέπων πρὸς τὰ πράγματα τοῖς ὄμμασι καὶ ἑκάστῃ τῶν αἰσθήσεων ἐπιχειρῶν ἅπτεσθαι αὐτῶν. ἔδοξε δή μοι χρῆναι εἰς τοὺς λόγους καταφυγόντα ἐν ἐκείνοις σκοπεῖν τῶν ὄντων τὴν ἀλήθειαν. ἴσως μὲν οὖν ᾧ εἰκάζω τρόπον τινὰ οὐκ ἔοικεν. οὐ γὰρ πάνυ συγχωρῶ τὸν ἐν τοῖς λόγοις σκοπούμενον τὰ ὄντα ἐν εἰκόσι μᾶλλον σκοπεῖν ἢ τὸν ἐν τοῖς ἔργοις· ἀλλ' οὖν δὴ τάυτῃ γε ὥρμησα, καὶ ὑποθέμενος ἑκάστοτε λόγον, ὃν ἂν κρίνω ἐρρωμενέστατον εἶναι, ἃ μὲν ἄν μοι δοκῇ τούτῳ συμφωνεῖν, τίθημι ὡς ἀληθῆ ὄντα, καὶ περὶ αἰτίας καὶ περὶ τῶν ἄλλων ἁπάντων τῶν ὄντων, ἃ δ' ἂν μή, ὡς οὐκ ἀληθῆ.* He goes on to explain that the method is the familiar way of Ideas, postulating the existence of an essential beauty and goodness and greatness and so on (*ὑποθέμενος εἶναί τι καλὸν αὐτὸ καθ' αὑτὸ*). These are the only causes he pretends to understand. "I know nothing and can understand nothing of any other of those wise causes which are alleged; and if a person says to me that the bloom of colour, or form, or any such thing is

a source of beauty, I leave all that, which is only confusing to me, and simply and singly, and perhaps foolishly, hold and am assured in my own mind that nothing makes a thing beautiful but the presence and participation of beauty in whatever way or manner obtained; for as to the manner I am uncertain, but I stoutly contend that by beauty all beautiful things become beautiful" (100 D).

Of this very interesting account the following interpretations have been offered:—

(1) The knowledge Socrates abandons as too hard for him is the knowledge of natural science, the investigation of physical causes, from looking at which Socrates turned to study the "inner world of thought," making thought a sort of mirror of reality.

But it is totally unlike Plato to give the objects of physical science any reality at all, much more to make them superior in reality to the objects apprehended by thought (concepts as distinguished from percepts), to λόγοι. Would Plato for a moment have regarded the knowledge of final causes (revealed by the method of Ideas) as "second-best"? Would he have thought the modifying clause (*οὐ γὰρ πάνυ συγχωρῶ*, κ.τ.λ.) a sufficient criticism of a view that was a denial of his whole philosophy? Besides, Socrates has been explaining that the principle he has failed to attain to was the principle of the sustaining power of the good (99 C), and that both the first and the second methods lead to the knowledge of this the final cause (*τὸν δεύτερον πλοῦν ἐπὶ τὴν τῆς αἰτίας ζήτησιν*). But natural science with its "airs and ethers and waters," recks nothing of final causes.

These objections have led to another interpretation which has at least the merit of not attributing to Plato a doctrine subversive of all his principles.

(2) The method Socrates abandons as beyond his reach is the direct study of the eternal Ideas. He is driven to investigate the ultimate reality not in itself but in thought-images, in universals or concepts "which shall represent the Ideas to him".

This view has the support of Mr. Archer-Hind and Prof. H. Jackson, the former of whom argues as follows—"The passage, as I read it, has the following significance: I attempted, says Socrates, to discover *τὸ ἀγαθὸν* as the ultimate cause working in nature. But when, after long endeavour, I failed in the struggle, I began to fear that by fixing my gaze too intently on realities I might be blinded in soul, as men are bereft of their bodily vision by gazing on the sun. So I bethought me of framing in my own mind

images or concepts of those realities which I desired to study, and in them safely to examine the nature of their types. But though I admit these concepts are but images of the realities, mind I don't allow they are so in any greater degree than material phenomena: both in fact are images; but whereas phenomena are the images presented to us by our senses, concepts are the images deliberately formed by our understanding; concepts therefore are more real than phenomena in proportion as understanding is more sure than sense" (*Phædo*, App. ii., p. 189).

This interpretation has no support in either the language or the logic of the passage.

A. (1) There is nothing in the Greek to suggest the distinction of "universal" (λόγος) and Idea, and there are several expressions which imply their identity; *cf.* particularly 100 A, ὑποθέμενος ἑκαστότε λόγον, with 100 B, ὑποθέμενος εἶναί τι καλὸν αὐτὸ καθ' αὑτό,[1] where λόγος and εἶδος seem equivalent, just as we have οὐσίαν τε καὶ λόγον in *Phædrus* 245 E.,

(2) The interpretation gives a very forced sense to straightforward expressions. Surely ἐπειδὴ ἀπείρηκα τὰ ὄντα σκοπῶν must refer to what has just preceded, the history of Socrates' experiment in the study of nature, and the words μὴ παντάπασι τὴν ψυχὴν τυφλωθείην βλέπων πρὸς τὰ πράγματα τοῖς ὄμμασι καὶ ἑκάστῃ τῶν αἰσθήσεων ἐπιχειρῶν ἅπτεσθαι αὐτῶν (99 E) lose all their meaning unless they refer to sense-objects grasped in sense-perception. The argument that τυφλωθείην here cannot apply to the obscurer objects of sense is absurd. The word was used in just the same meaning a few pages back (96 C). The rapid and ceaseless process of phenomena as they appear to the philosopher's eye might be compared with the effect of a dazzling light, though Socrates himself is unwilling to press the analogy. Further, it is so difficult to fit into the view under consideration the words that follow (βλέπων . . . ἅπτεσθαι αὐτῶν), that both Mr. Archer-Hind and Prof. Jackson are inclined to resort to the desperate theory of interpolation. But their case demands a far more rigorous excision.

B. The logical difficulties are no less serious.

(1) If Plato had made this distinction of "universal" and Idea he would have cut himself off from all knowledge of reality, though he has in this same dialogue already expressed confidence in his power to grasp it. The theory of ἀνάμνησις might indeed suggest the distinction of concepts or the "reminiscences" of Ideas from the Ideas themselves, but

[1] Since writing the above, I notice that this argument has been employed already by Mr. R. P. Hardie in *Mind*, N.S., vol. v., p. 171.

such a distinction would have been self-destructive, for being for ever cut off from knowledge of the Ideas we are for ever incapable of knowing that the concepts are like or "represent" the Ideas. The tentative and temporary theory of *ἀνάμνησις* must not be pressed to this conclusion, for Plato here in the dialogue which introduces that theory states very clearly his belief in the soul's direct knowledge of reality, her "communion with the unchanging" (79 D), her "pure apprehension of pure existence" (83 A).

(2) The interpretation fails entirely to account for the discussion of physical or efficient causes and to relate that investigation to the course Socrates represents himself as now pursuing, and it fails to show how one or the other method of study is connected with the ultimate principle, "the necessary and containing power of the good".

The whole difficulty arises from a failure to recognise that in fact the teleological explanation was for Plato the ultimate principle of *all* knowledge. Why did the philosophy of Anaxagoras cause so profound a sense of disappointment in the mind of Socrates? "And I thought that I would then go on and ask him about the sun and moon and stars, and that he would explain to me their comparative swiftness, and their returnings and various states, active and passive, and how all of them were for the best" (98 A). Natural science is no knowledge at all unless it seeks to answer this last question. *His* natural science, the study he perforce abandoned, sought to answer this question. It was to be something more than the science of the physicists who mistake the presuppositions of knowledge for knowledge itself. The science that constituted his first method was not physical science at all, as ordinarily understood. Physical science investigates physical law, but law reveals reason and reason seeks an end. Therefore we postulate an end behind the law, and because science or the knowledge of law is not necessarily the knowledge of the end which it implies, it can never by itself satisfy such an inquirer as Socrates or be regarded by him as knowledge at all. He himself tried to find the knowledge which consists in the relation of the facts of science to the principle of the good, but found the task too hard. He could not rest content with the efficient causes, but when he tried to go beyond them, the multiplicity of the phenomenal world bewildered him. It was as if one should attempt, say, from the movements of the chisel to explain the beauty of a statue or, to take his own instance, from the various co-ordinations of muscle and bone to explain the presence of Socrates in the State prison of Athens. Or per-

haps we may compare it to the attempt to read the design of a tapestry from the crossing and interweaving of the threads, a method more difficult and more minute and conceivably impossible. It may happen we are looking on the wrong side of the cloth, that which does not reveal the design. In rational conduct this design, the only possible design, is the good. "When we walk we walk for the sake of the good and under the idea that it is better to walk, and when we stand we stand equally for the sake of the good" (*Gorg.*, 468 A). In the phenomena of experience this design is too hard to unravel. We give up the attempt, in this world of constant becoming, to understand how behind it there lies the "binding power of the good". Yet since the world is essentially rational (this view is fundamental for Plato's earlier thought, that the forces of the world without us are actuated by the same power that lives and moves in us) such a connexion must remain an "hypothesis".[1]

This then is the method that Socrates abandons for his alternative way. Instead of seeking the goodness of the phenomenal and changing[2] we may turn our attention to the permanent revealed in and through this constant process, the universal that abides, which is in truth all that is known or knowable in the world of becoming. If we can relate these permanent elements to the principle of the good, can see these to be reasonable, we shall have explained everything in the phenomenal as well—except the fact of its phenomenality. The abiding is the real; if we can explain the abiding, or the universal, we shall have accomplished even more than was possible by the first method, we shall have shown the goodness or the reason of the permanent in its permanence, instead of in its transient manifestation,—we shall have understood reality.

(It was only at a later stage that Plato saw how little it availed to call some obstructing element "unreal," and indeed the later realisation of this truth had much to do, as will appear presently, with the modification of the theory.)

So far as the ultimate principle is concerned Plato might

[1] We may note that in the *Timæus* Plato does make the attempt, though only on "probable" grounds, to construct the natural science here abandoned as too hard, a science, *i.e.*, which relates laws to ends.

[2] Note that Plato says τὸν ἐν τοῖς ἔργοις (σκοπούμενον τὰ ὄντα) (100 A), not τὸν τὰ ἔργα σκοπούμενον. The ὄντα are the phenomena known in their reality, *i.e.* in their relation to the good (for Plato holds with Parmenides, ταὐτὸν δ' ἐστι νοεῖν καὶ οὕνεκεν ἐστι νόημα), the ἔργα the inadequately known objects of physical science. How else can the opposition be accounted for?

have left the universals outside the rank of the Idea, but this the logical method rendered impossible. That method gave the same kind of reality to all universals. What Plato therefore has to do is to show the relation of these inferior Ideas to the archetypal Idea, and this begins to appear, though obscurely, in the *Phædo*. Everything is what it is by participation in some λόγος; the great, the small, the equal share in greatness, smallness, equality—they are what they are in virtue of the form or proportion they exhibit. So far then they are explained by reference to what is more real than themselves. But these reals are not reals in their own right, and therefore not a sufficient explanation (*cf.* ἄλλην αὖ ὑπόθεσιν ὑποθέμενος, ἥτις τῶν ἄνωθεν βελτίστη φαίνοιτο, ἕως ἐπί τι ἱκανὸν ἔλθοις, *Phædo*, 101 D). A thing is great because it shares in greatness, we must say, but only when we know that it is good to share in greatness, *i.e.*, that greatness shares in goodness, have we the true explanation. Just as phenomena reflect the Ideas, so do the lower Ideas reflect the good. The system begins to appear as an hierarchy. The only way up from these lower Ideas is by the recognition of their participation in the good, just as the only way from the world of sense is by the recognition of its participation in the Ideas. The two methods of the *Phædo* are now clear; the one would go straight from phenomena to the archetypal Idea, the other uses the lower Ideas as media. This is the explanation of the ascent by hypotheses suggested in the *Phædo* (101 D) and more explicitly described in the *Republic* (511 C).

Already in the *Republic* the difficulty caused by the introduction of the second class of Ideas has forced itself on Plato's attention. In the *Republic* he virtually says that these both are and are not Ideas; he admits in fact that only the self-explanatory is Idea, only that in which the light of its own purpose is manifest. Hence the division of the world of νοητά into two sections, of which the higher consists simply of the true or ethical Ideas. (Plato distinguishes these latter Ideas as the good, the beautiful, and the true, but it is obvious that the lower members of that hierarchy are there at all because of their ethical significance, their immediate attractiveness or "value".) The lower section is only potentially or "hypothetically" Ideal, the "hypothesis" being not the existence of these objects, but their goodness,[1] that

[1] Prof. Jackson, in an otherwise instructive article in the *Journal of Philology* (vol. x., p. 144), misses this important point. He says: "His meaning must be that the geometer starts from such propositions as, 'There may be such a thing as length without breadth, henceforward

they are best and for the best. When they are seen in the light of the good, when they reflect the good, they become objects for the pure intelligence (*καίτοι νοητῶν ὄντων μετὰ ἀρχῆς*, 511 D). We destroy their hypothetical character.[1]

Within the world of Ideas there is now an essential cleavage manifest, in fact there is a certain inconsistency in making these mathematical concepts Ideas at all, for if the objects of sense 'reflect' the various Ideas and yet are not, when seen in this light, made objects of pure intelligence, why should *τὰ μαθηματικά* become such intelligibles when they reflect the good? If these are to be Ideas we want a new name altogether for the highest class of existences. It may have been a perception of this difficulty that led Plato at some time to give the mathematical concepts a place midway between Ideas and phenomena.

But in the *Republic* this inconsistency has not yet broken up the Ideal system. In books vi. and vii. Plato definitely attempts to read the universe in the light of the Idea, and the scattered hints of the *Cratylus*, *Symposium*, *Phædo* and perhaps *Phædrus*[2] are now developed into a coherent system. It may be well to look at this unification before considering how the unreconciled elements rendered the unity only ap-

called a line,' but does not show, or even attempt to show, that there is such a thing. If he could prove that there is such a thing, this which is now a *ὑπόθεσις*, *i.e.* an *ἀρχὴ ἀναπόδεικτος*, would become an *ἀρχή* proper." But in the first place the geometer never does make such a proposition—he is not concerned with any other existence of lines and circles than that existence which they have for his thought, and his study is not in the least affected by the denial of straight lines "in nature". In the second place, no philosophy proves or tries to prove these "hypotheses," and Plato least of all would suggest that the mathematician may be making a mistake by investigating thought-realities for whose objective existence he has no warrant. How can they be placed in the region of *νοητά* at all unless already they are recognised as belonging to the real? What is yet unconfirmed is their relation to the supreme reality. Because the world is rational—this being the fundamental hypothesis—they *must* be related to the good, but so far this is taken on trust. The hypothesis is simply the act of faith which the full vision of goodness will render needless.

[1] *Cf.* 533 C, *οὐκοῦν ἡ διαλεκτικὴ μέθοδος μόνη ταύτῃ πορεύεται, τὰς ὑποθέσεις ἀναιροῦσα*, when their goodness is manifested or their relation to the good. The mathematician does not ask the value of the square and circle, he keeps within the bounds of his spatial systems; but if "God always geometrises," it is not for the sake of geometry. As the phenomenon is an image of the Idea, so is the lower Idea, the mathematical object, an image of the highest—when seen in its goodness (*cf. Rep.*, 517 B *sqq.*).

[2] Certainly the argument of the *Phædrus* suggests a fairly early date, though stylometric evidence seems to place it not earlier than the *Republic*.

parent, and led Plato, who showed here an energy of self-criticism unparalleled in the history of philosophy, to a deep and progressive process of modification and reconstruction.

The world is fundamentally rational. The real is the abiding, and the abiding is the knowable, therefore the real is the knowable. The reason that is in us is the reason that is in the world. Reality has two aspects, the known and the knower, and these correspond in every relation—as is the kind of object so is the kind of knowing. "All nature is akin and the soul has learnt all things," Plato had already said in the *Meno* (81 C), and now he shows how truth and understanding are begotten of the contact of the pure intelligence with the pure Idea (*Rep.*, 490 B). So again to the desire of mind there corresponds the desirableness of the object of mind. The philosopher is not simply the knower of knowledge, but also the lover of it because knowledge is lovable; and the universe is representable as a scale of existences corresponding to the various faculties of knowing. There is no attempt so far to give priority to either aspect, mind or existence. The Ideas are eternal, and so is mind that knows the Ideas.[1]

It is noteworthy that the description Plato here gives of the Ideas is truest—and indeed profoundly true—of the ethical Ideas. The peculiarity of these has already been

[1] Zeller and other critics argue in favour of making the Idea of the good identical with Deity. This view does not fit into the construction outlined above. The Ideas are powers but not intelligences; they are even akin to intelligence inasmuch as mind can only know what is of its own nature, but they are essentially the correlates of mind in an eternal correspondence. The difficulties of the position we may well believe led Plato to postulate an original creative mind (of which there are hints already in the *Republic*), just as a further difficulty to be considered later led him at last to postulate two world-spirits—but by that time the Idea theory had undergone much modification. The Idea theory demands this correspondence throughout, so that at the summit of the scale of existences there would be the good as perfectly known (*i.e.*, the good as it fully is) and the perfectly pure intelligence that knows it, *i.e.* God. This is the logical relation of the Deity and the Idea of the good, as is implied in *Parm.*, 134 D, "and if there be such a thing as participation in absolute knowledge, no one is more likely than God to have this most exact knowledge". The development of the view that creative intelligence is prior to created existence is part of the process of reconstruction (*cf. Philebus*, 22 C). In the present view mind is not regarded as originally creative nor yet are the Ideas powers in themselves. It is out of the correspondence of mind and Idea that creation is created. If so, Zeller's question (*Plato and the Older Academy*, Eng. ed., p. 267 n.), "Is the Divinity actually a second cause together with the Idea, or merely another expression for the causality of the Idea?" presents no dilemma at all. Plato, who had to face as had never been done before the question of the relation of knower and known, of the subject and object of thought, did not begin with but only ended in dualism.

dwelt upon; being able to serve as ends or purposes they are something more than mere concepts, and all the characteristics which Plato ascribes to his Ideas are *in some sense* applicable to these. They are powers, being final causes. In a rational world—the world as now conceived by Plato—there can finally be no distinction between *ought* and *is*, the possible of realisation and the realised, and so also whatever *becomes* possible is *ipso facto* made actual.[1] We may compare how even Aristotle who so constantly attacked the dynamical deficiency of Plato's theory made the conclusion of his practical syllogism not the recognition of some particular end as to be done, but the doing itself.[2] Further they are exemplars to be realised in action, "fore-pictures" of something to b produced (as Fichte said), thought-schemes to which a phenomenal counterpart, a concrete action, can somehow correspond. They are prior and "above substance," in so far as in a rational world the goodness of a thing is the very ground of its existence. They are purer, more perfect than their realisations in action, for "what act is all its thought had been"? What exemplar is not better than its copy? In all conscious production it might be held that the idea or form being manifested is better than the manifestation, that the expression is never adequate to the thought that is expressed.[3] Finally they all lead up logically to one supreme end presupposed in every mediate end and making them all coherent, an end which so far as the world is rational is the ultimate explanation of all things. So much perhaps we may say without entering on the controversial ground of metaphysic at all, though the elements of controversy are not far off.

[1] *Cf.* Kant, *Kritik der Urtheilskraft*, "Eine intelligibele Welt in welcher alles darum wirklich sein würde, bloss nur weil es (als etwas Gutes) möglich ist".

[2] *Cf. De Motu Animalium*, 701 *a* 9 *sqq.* "Whereas in the theoretical syllogism the end is inference, the apprehension of the two premisses being the apprehension and putting together of the conclusion, in the practical syllogism the conclusion that arises from the two premisses is action. Thus when a man apprehends that every man should walk and that he himself is a man, an act of walking immediately follows." Of course the ethical concept cannot unless particularised, cannot as a pure Idea of the good, become an end, and does not necessarily become one even then, and if it does become an end, its realisation does not necessarily follow. What is said above of ethical Ideas must be understood with this reservation.

[3] It is true that Goethe speaks of his work as containing more than he knew, and Kant declares that we can sometimes better understand an author in his words or writings than he understood himself, but that does not touch the question of the relation of the end as conceived to the end as realised. It is, to say the least, logically impossible that the realisation (or expression) should be *more* than adequate.

But the further we pass from the ethical Ideas the greater do the difficulties grow, the more alien are the elements introduced into the system. This becomes manifest in the last book of the *Republic* itself, where now the logical principle is openly asserted—"whenever a number of individuals have a common name, we assume them to have also a corresponding Idea" (*Rep.*, 596 A), and accordingly the instance of a bed is chosen, and the analogy drawn, picture of a bed : a bed : : a bed : Idea bed—an analogy not possible in the case of the ethical or even of the mathematical notions. We seem to have now introduced a third class of Ideas, with which our difficulties grow exceedingly. In fact in such a case the Idea can be nothing except the form or shape of the object given by analogy, a kind of self-subsistence, and the famous "third man" argument (attributed to the sophist Polyxenus but really only a development of an objection suggested by Plato here (597 C)) depends entirely on the conception of Ideas as shapes or forms. This objection, like many another, is quite inapplicable to the earlier conception, to the "colourless and *shapeless* and intangible essence" that originally the term Idea signified (*ἡ ἀχρώματός τε καὶ ἀσχημάτιστος καὶ ἀναφὴς οὐσία ὄντως οὖσα*, *Phædr.*, 247 C).

In fact to understand the Idea system as a coherent whole, to understand the scheme of *Rep.*, vi. and vii., we must remember that it is based on and leads up to the primary Idea of the good. This Idea is ultimate, ultimate for knowledge and for reality. If so, it must be admitted as a fundamental "hypothesis" that whatever we know is what it is because that is for the best and that whatever becomes becomes for the best, in short, that every efficient cause is for the sake of a fully rational final cause. But here the inconsistency of a metaphysic at once absolute and teleological reveals itself (though it is perhaps less obvious in a system which makes the ideal a good to be attained rather than a law to be observed). Plato realised the difficulty, and after various attempts to save the situation by calling "unreal" whatever was neither absolute nor "for the best," by making the objects of opinion, the world of multiplicity and error, a strange union of "real" and "unreal," "tossing about in some region which is halfway between pure being and pure not-being," chose to be greater than his system, to reveal rather than obscure its difficulties. The main difficulty was the obvious problem of all ethical or religious monism; if the world is rational, whence the "unreal," and whence error: if good, whence evil? If the real is the abiding, is not becoming itself an abiding principle? Thus the two problems, the problem of

change, in general of movement, the problem of evil, in general of imperfection, are unsolved, nay insoluble, on the Idea system as now conceived. It was to the fuller consideration of these that Plato now turned.

Hitherto he had somewhat neglected one side of reality. His characterisation had been of the known rather than of the knower, of the Idea rather than of the soul for which it is. But now that the difficulties just mentioned became prominent, he was led to consider more especially this other side. For the real evil is the evil in the soul (*Rep.*, 353 E *sqq.*), and as for movement, surely it must be explained by the self-moving, the soul which is the beginning of motion (*Phædr.*, 245 D). What if after all the τόπος νοητός be νοῦς itself?

V.—DISCUSSION.

HUMANISM, INTUITIONISM AND OBJECTIVE REALITY.

I.

I do not know that there is much in Father Walker's reply (N.S., No. 71) to my comments (N.S., No. 69) on his article in N.S., No. 67, to which I need take exception. He has certainly made much more intelligible in it the exact nature of the parallel between Humanism and the philosophy of Martineau which he originally sought to draw. But he has also qualified it considerably, and confessed that the comparison only holds between essentials in the one case and secondary features in the other. It is no wonder, therefore, that I failed to recognise so recondite a likeness.

It is true that the experience of consequences is not, in Martineau's philosophy, entirely cut off from all influence on the judgment of moral worth. Martineau admits that their computation "is already more or less involved in the preference of this or that spring of action," and again, that "the choice of means by which to carry out the workings of a spring of conduct can be made only by consideration of consequences". But these admissions, though they temper, can hardly be held to override, the dominant intuitionism of his view. In the very same passage in which they occur,[1] he goes on to explain that the "Canon of Consequences" is "a subsidiary rule" and to be regarded as intellectual rather than moral, and contrasts it with "the Canon of Principles which gives the true *Moral Criterion* for determining the rights of the case" and "suffices for the estimate of *Character*". Plainly therefore the appeal to consequences was, for Martineau, quite a secondary and subsidiary affair, on which little stress was laid. Apparently, moreover, he supposes that it is possible to 'compute' the nature of the consequences once for all, and thereby to *fix* the order of the 'springs of action' for all time, though he says so little about this empirical factor in his system that one can feel sure of this only because otherwise the whole would crumble under the pressure of experience.

In the Humanist elaboration of truth on the other hand this

[1] *Types of Ethical Theory*, ii., 255-256.

constant pressure and reaction of experience is the essential thing that determines the direction of intellectual progress. For though experiments of all sorts are tried, only a few succeed; and so human needs and postulates can hardly sustain themselves against a persistently hostile course of events. Nay, they have themselves absorbed to a vast extent the lessons of experience. It is true that the initiative rests with them and that they always make the first move. They are psychologically primary and indispensable, and seem at first sight arbitrary. But ultimately this arbitrariness is an illusion, except in so far as the 'matter' they work upon is really plastic to their manipulation—as, to an as yet undetermined extent, it appears to be. Thus though the doctrine is psychologically an apriorism, it works out logically as an empiricism. This *change of quality* causes I believe the chief difficulty intellectualists seem to have with Humanism; they do not grasp that 'origin' does not necessarily determine 'validity' and that things may really *change* their character.[1] At any rate it is clear that because of this unceasing criticism of human demands by the course of experience, the notion that we can (or should) compile a hierarchy of human needs to be referred to in all doubtful cases, is essentially impracticable. It is impossible to say *a priori* and beforehand of what demands satisfaction may be obtained, or to guarantee that the particular order of rank which seems to be empirically proper now must be rigidly preserved to all futurity. Of course this does not deny that inquiries into the present rank of needs and satisfactions may have considerable interest and temporary value. But they would be concerned with the working out in detail of what it is as yet more urgent to establish as a principle. If Father Walker will help, he is very welcome; but it is no objection to Humanism that all the applications of its principles have not yet been made.

To conclude the subject of the relation between Humanism and Martineau it will suffice to refer to two of Father Walker's admissions. He admits (p. 408) that according to Martineau an intuitive judgment of Conscience lords it over the (partly empirical) springs of action. He also admits (p. 409) the distinction that whereas in Humanism "consequences determine logical values relative to human needs, in Martineau human springs of action determine ethical values relative to consequences". Plainly therefore what is primary in the one theory is secondary in the other and *vice versa*. I am quite content with these admissions and also with the way Father Walker has now dropped the Absolute. For it has long been the primary aim of my philosophic efforts to make clear the total and irremediable irrelevance of this treacherous notion to every problem of human knowledge.

[1] This difficulty ultimately no doubt arises from an old intellectualist postulate that change is unthinkable.

II.

But if I stopped at this point I might fail to content Father Walker, who considers that the charges of 'subjectivism' and 'minimising the intellect' have not been met by me, but only denied.[1] Hence I feel bound to attempt an answer to the questions he puts to me.

(1) He asks why, if I do not intend to minimise the intellect, I should reduce it to the powers of inhibiting impulsive reactions and analysing a situation. Now (*a*) in the first place the passage in *Studies in Humanism* (p. 356) to which (quite rightly) he refers, mentions also two other factors in the intellectual functioning, *viz.*, the *rearrangement* of the presented continuum and the *salutary modification* of the habitual reaction. Both of these are subsequent to the 'analysis' at which intellectualism is content to stop; both are essential because they form the tests of the value or 'truth' which the 'analysis' claims, and the former at least might demand recognition even from the most abstractly intellectualist conception of intellectual functioning. The objections to intellectualism at this point are that in the first place it provides no reason why the mind should function at all, and in the second it provides no means of distinguishing valuable from worthless functioning.

(*b*) In the second place, while I willingly and fully admit that my own analysis (like many of my positions) might be greatly improved by further elaboration and exemplification, I can see nothing degrading to the intellect in the functions assigned to it. And so I can fairly claim that my *intentions* at least were innocent and void of offence. I was merely trying to state in definite psychological terms the value of the intellectual processes which all reflective men have always felt, but which hitherto have been the subject only of vague and uninstructive eulogy. In other words, I was trying to answer the questions—'What *is* Reason?' and 'What does it *do* for man?' If Father Walker, or any one else, can give better answers, I shall be happy to adopt them. But I am not acquainted with any rationalistic attempt to define 'Reason' in scientific terms.

(*c*) I must protest against the false abstraction of Father Walker's distinction between the 'strictly cognitive' and the 'merely physiological' aspects in the 'rational' act. The whole point of my analysis was that the function of analysing a presented situation must *not* be separated from its *biological* value and that consequently no part of the whole process was either 'strictly cognitive' or 'merely physiological'. It is purposive and vital and

[1] I had always regarded every line that I had ever written as an implicit refutation of such charges, but can now also point to a more explicit treatment of both in articles in N.S., No. 70, and in the Aristotelian Society's *Proceedings*, 1908-1909.

personal *throughout*, and only truly *intelligible* as such. The humanist interpretation is in principle a protest against destroying the biological integrity of rational action by applying to it such artificial, dualistic and inadequate distinctions.

(2) Father Walker wants to know why, if we have not intended to insult man's intellect, we have called concepts 'symbols'. In reply, I may say (*a*) that I cannot remember that I have ever done so. But (*b*) even if I had, I should not certainly have conceived a symbol as "an arbitrary sign which has no meaning apart from a concept and cannot of itself represent, though it may stand substitute for, objective reality". 'Arbitrary' could not mean for me 'illegitimate' and absurd. Nor could signs be said to 'have' meanings *per se*. Again, the distinction between 'representing' and 'standing substitute for' is hard to swallow for one who has discarded the 'correspondence' theory of truth. And lastly (*c*), I can see no reason why "symbolism, when applied as a general principle to the product of intellectual activity," should "imply subjectivism".

(3) Father Walker ascribes to us the doctrine that as all knowledge has a personal tinge and is relative to our needs, it to some extent *mutilates* even the perception of facts. On this he bases a 'dilemma'. If the 'personal tinge' and the 'effects of mutilation' do *not* permeate all knowledge, but leave some intact, it is possible to abstract from them; while if they *do*, "knowledge can have for us no really objective significance and meaning". For we cannot then "eliminate what is the product of our own subjective activities from what is due to the reaction of the object" (p. 410).

I must point out (*a*) that while it is a humanist contention (and one which has never seriously been impugned), that all knowledge *is* personal and relative to human needs, it is emphatically *not* asserted that it is any the *worse* for this. The 'object' is not 'mutilated' by becoming an object of knowledge. But for this process it would not *be* at all. And it does not lose, but gain. It is not deprived of any value, but literally receives thereby all the *value* it has. To interpret the *selectiveness* which pervades all perception and all thinking as a 'mutilation' of 'fact' is not a humanist doctrine at all. It once was the pet doctrine of Mr. Bradley in his absolutist days. As compared with the uncritical 'objectivism' (which apparently some forms of modern 'Realism' are anxious to share with sensationalism and Hegelian panlogism) which imagined that 'objects' entered minds *proprio motu* and that the percipient had nothing to do with the way in which his 'objects' appeared to him, it was no doubt an enormous advance. For it began to recognise the activity of the human knower. But in itself the position was totally untenable and could only end in scepticism. For though it was not naïve enough to look for incorruptible 'facts' on earth, it was sophisticated enough to represent 'knowing' as a way of corrupting facts.

I take some little credit for discovering (some years apparently

before Mr. Bradley himself) that this interpretation of human activity as a 'mutilation' was a fatal mistake, and for making this discovery a starting-point for the humanist criticism of that eminent ex-absolutist. To escape from the arbitrary and gratuitous scepticism in which the rationalist theory of knowledge had needlessly involved itself seemed easy enough. One merely had to take the bull by the horns, and to recognise the so-called 'mutilation' as a normal, necessary and salutary procedure, which far from undoing knowledge, was literally the making of it. For how could determinate objects and scientific facts arise out of the primary chaos of presentations and come to exist for us at all, without such selecting, shaping and adjusting to our purposes?

In adopting this attitude Humanism does not of course stand unsupported by philosophic precedent. It is only carrying through more resolutely, completely and consistently the principles of every critical theory of knowledge there has ever been. That the objects of ordinary perception cannot be simply taken as given without more ado, is common ground which Humanism shares with Hume, Kant and modern psychology. Indeed it is mainly the growth of scientific psychology that enables it to show that what for Hume was merely an incitement to doubt, and for Kant merely an unproved postulate of metaphysics, *viz.*, the so-called 'subjective' factor in knowing, is a thoroughly indispensable item in any scientific treatment of actual knowing. Only instead of saying intellectualistically 'the *understanding* makes the object,' Humanism ascribes this function to the whole man as the heir of all the ages, and explains in detail how he does it. The advance is so direct and obvious that I cannot believe that merely dogmatic assertions about the intuitive givenness of objects, which make no attempt to explain the facts of perception, will induce philosophy to sacrifice a principle it has laboured so long to make clear.

It is evident, therefore, which horn of Father Walker's dilemma we must choose. Personality and choice cannot be disavowed. They pervade *all* knowing and participate in the building up of *all* objects. But does it follow that therefore knowledge can have no objective significance and meaning? Nothing could be further from the truth. The significance and meaning of knowledge are thoroughly human. Relation to human purposes is the sole source of its value. It is what discriminates the real from the unreal, the true from the false, the good from the bad. All value is strictly 'subjective'; it is an attitude which cannot be conceived without a mind which is a judge of values. Neither can meaning exist without a mind which means, nor can any 'object' or 'fact' be recognised, except through a cognitive process which always selects, *i.e.*, reacts on, rearranges and reconstructs its data.

Call this process 'mutilation' if you please, but realise at least the implications of the bad name you are affixing to our knowing. It commits you to the dogma that the real object is unknowable,

and that knowledge is impossible. And do not imagine that you can close your eyes to processes which occur in every act of cognition, even by the desperate device of denying the existence of psychology.

III.

But I am not of course accusing Father Walker either of a self-sought scepticism or of a wilful blindness. His real position is well brought out by his final paragraph. It is that of practical commonsense realism, which takes for granted the reality of objects of perception until there is occasion to doubt them.

This is a position no pragmatist can assail without compunction. If philosophy were *merely* commonsense, and if commonsense were *never* puzzled, there would be no assailing it. But though our commonsense acceptance of objects works pragmatically for most purposes, it inevitably engenders the difficulties which incite to philosophic wonder. After all even in ordinary life men *sometimes* perceive falsely and reason wrongly. They desire therefore to avoid error and illusion, and to be told how to do this. Hence the question arises *how* false perception and error are to be detected and conceived. And to this question the humanist epistemology gives the only answer in existence. Its answer is the only real one, because it is the only one which *discriminates* between a 'truth' and a 'reality' which *excludes* and one that *includes* 'error' and 'unreality'.

To effect this discrimination successfully, and to satisfy the practical man who means something more by 'truth' than formal 'claim,' it may be necessary to transcend naïve realism. It may require 'methodical doubt' and a recurrence to the principle of Descartes. But I fail to see anything 'methodical' about a 'credulity' which fights shy of any systematic account of error and illusion, and merely 'hopes' that on each occasion what it apprehends as 'reality' may not turn out to be 'illusion'. Neither practically nor 'theoretically' does such an attitude seem to meet the requirements of a theory of knowledge. And inasmuch as after all this procedure is merely what "the realist *prefers* to start from," it does not seem clear even how he escapes from the charge of 'arbitrariness' in the worst sense which he has himself attached to this term. Surely it is a perverse intellectualism that would prefer to fail by remaining uncritical to succeeding by becoming 'arbitrary' (*i.e.*, *selective*). And it is only in the eyes of a dogmatic determinism that the exercise of choice which the 'arbitrary' implies carries with it its irrevocable condemnation.

F. C. S. Schiller.

VI.—CRITICAL NOTICES.

A Pluralistic Universe. By William James. Longmans, Green & Co., 1909. Pp. vi, 405.

Like everything that Prof. James gives us, this course of Hibbert Lectures on the Present Position of Philosophy has a freshness and charm about it which is almost enough to disarm criticism. It is an eminently distasteful task to set to work, as a critic must perforce do, to find flaws in a book which has yielded him intense enjoyment. And Prof. James's book is one which, I should imagine, even those whom it directly attacks cannot help enjoying. It is all so breezy, so fresh, so alive with humour and happy illustration that the firmest adherent of the Monism which it lashes so unsparingly could hardly find it in his heart to wish that the scourge had been laid on with a lighter hand. Prof. James's polemic withal is, as usual, of that urbane kind which leaves no bitterness behind it; the wounds he inflicts with so much gusto, like those of the righteous, are a "precious balm". For myself, I will add, the book is something more; it seems, at least, to make it clearer than the last published utterances of the author what it is that he finds fundamentally wrong in the mental attitude which he has so long been denouncing. But before I attempt to indicate what seem to me to be the essential features of Prof. James's doctrine in its latest exposition, and some of the difficulties I think I find in it, I should like to refer, in the interests of justice, to one or two minor blemishes. Prof. James, as it seems to me, has not avoided a source of unconscious unfairness, the nature of which he has himself in this very book analysed with great happiness, what one may call the fallacy of reasoning from a self-made classification. He complains himself that his opponents, having once set him down as a Pluralist, proceed to form their own conception of what the Pluralist is bound to believe, and then assume that he must hold every position, however absurd, which they have shown to their own satisfaction to follow from *their* definition of Pluralism. The procedure is unjust enough, but the odd thing is that Prof. James is all along treating his opponents in the very same way. He starts with his notion of what Monism or Intellectualism must be, a notion derived apparently from the consideration of views held by one or two eminent thinkers, such as Spinoza and Mr. Bradley; on the strength of this notion he frames a general conception of an "ism,"

Monism or Intellectualism, rubricates a number of thinkers under either head, and then takes it for granted that the individuals so rubricated *must* exhibit the vices of the "ism" to which they have been assigned. The most striking illustration of this injustice is afforded by the treatment meted out to the greatest of all philosophers. Plato gets set down as an "Intellectualist," apparently on the ground that he held right definition to play a fundamental part in science; then, as Intellectualism is understood by Prof. James to involve the belief that nothing can be true about a thing *except* what is asserted in its definition, Plato is saddled with this ridiculous theory (p. 218), and the "thinness" of Oxford absolute Idealism is found to be due to the place held by Plato and Aristotle in the "Greats" curriculum (p. 330). Now all this, let it be said with the utmost respect for Prof. James, is little better than nonsense. So far as Plato is widely studied in Oxford at all, it is as the author of the *Republic*, just as Aristotle is mainly known as the author of the *Ethics*, and if "thinness" means, as it appears to do, intellectual satisfaction in the contemplation of abstract metaphysical formulæ, it is the last reproach which should have been levelled at the philosopher who, more than any one before or after him, used his philosophy as the basis of a searching analysis of social and educational institutions and a daring scheme for their entire reconstruction. So, again, Fechner is deservedly praised for his splendid attempt to frame a positive conception of the hierarchy of beings who compose the Universe, but Prof. James seems to be quite unaware that the "world-soul," the "souls" of the planets, the life of plants are all prominent features of the Platonic view of the world, and that most of the analogies, taken from Fechner, by which Prof. James recommends the *Tagesansicht* of the Universe are to be found in the *Timæus*. Indeed Prof. James might almost have taken as a motto for his own attack on Monism such a Platonic saying as this: "the philosopher must needs therefore refuse his assent to those who say that the Whole, whether it be one or be many Forms, is static, while to those who hold that what is is change and nothing more, he must not so much as listen, but, in the words of the children's wish for 'all that is movable and immovable,' he must say that the one and all is both at once".

There are other pet views of Prof. James which equally strike me as due to the same tendency to rely too much on hastily-formed classifications. For instance, he will have it that Monism and Idealism are philosophies of the tender-hearted and sentimental, Materialism and Pluralism of the cynical. It might be a hard matter to "validate" this belief by an appeal to facts. There does not seem to have been much sentimentality about Spinoza, and Hegel and Schopenhauer were not precisely remarkable for tenderness of heart. And the spiritualist Descartes is about as cynical in his view of human nature as the materialist Hobbes. Altogether, Prof. James, in his anxiety to make out that everything is at bottom irra-

tional, seems to me to exaggerate the influence of temperament in determining a man's philosophical views. It counts for something, no doubt, but the mental environment perhaps counts for quite as much. The man who enjoys a good fight is pretty sure to be a materialist when the reigning views are spiritualist, and a spiritualist when they are materialistic. I doubt whether Prof. James himself would not at this moment be a champion of Monism, if only the fashion among Professors of Philosophy had happened to favour Pluralism. And something, after all, has to be allowed to a factor which Prof. James does his best to ignore, genuine intellectual conviction based on what are believed to be rational grounds. Locke and Herbart, for example, strike one as probably not very greatly influenced by temperamental bias in their outlook on things.

To come however to closer quarters with Prof. James's argument. I find it a little difficult to form a clear estimate of its force, inasmuch as it seems to be directed at once against two distinct enemies, Monism and Intellectualism. Apparently in Prof. James's mind the two are logically inseparable. To me it appears that the conjunction between them is accidental, just as it is a mere accident that, in the hands of Prof. James, Pluralism allies itself with Irrationalism. Surely if Rationalism means anything, the greatest pluralist of the classic German period, Herbart, was a rationalist, and equally surely the most thoroughly monistic philosophy of the same age, that of Schopenhauer, is as irrationalistic as the greatest hater of Rationalism could wish. Indeed, I would suggest that Monism is itself inherently *irrational*, and that no philosopher has ever arrived at the monistic result except at the cost of a breach with logic. (Belief in logic, it seems, is with Prof. James the distinctive mark of the intellectualistic beast. See pp. 211-218 of the present book.) Hence, while I am willing enough to admit that Prof. James succeeds in his second and third lectures in making Monism appear an illogical and absurd thing, I cannot see that his success is any proof of the illogicality and irrationality of the universe. Where the present book does appear to me enlightening is in the proof it seems to afford that Prof. James only hates Monism in a secondary and derivative way because he supposes that it is *par éminence* the consequence of Intellectualism. What he really seems to hate for its own sake with a perfectly disinterested hatred is logic, and the logician's habit of asking for reasons. If I do not misapprehend his contrast between Hegel and Fechner, his objection to Hegel is quite as much that he tried to give a reason for the faith that was in him, as that the reason was a bad one. I suspect even unqualified Monism would get a great deal more respect from Prof. James than it does if it were put forward magisterially without any appeal to reason at all. This anti-logical animus is, I must confess, something I find it exceedingly hard to understand. I cannot reconcile it with the fact that Prof. James clearly does not hold his beliefs merely as a matter of personal taste, because it

gratifies or amuses him to hold them, but seriously believes them to be truer and worthier of general acceptance than those which he wishes to displace. Not only does he make the logical absurdities of Monism a ground for rejecting it, but he has to construct arguments in order to persuade his audience of the illogicality of the real. And I presume he would allow it to be an intelligible question whether these arguments are sound or not. If it is an intelligible question, the canons of logic have not been given up "fairly, squarely and irrevocably"; if they have, surely it is waste of time for Prof. James to go through the form of pretending to offer us any grounds for imitating his *salto mortale.* The abandonment of logic is not even consistent with the doctrine that the sole test of a theory is its "validation" by experience. For, when logic has once gone "fairly, squarely, irrevocably" by the board, how do we judge whether a given experience "validates" an hypothesis or not? You may say, no doubt, that logic deals only with possibilities, and the real is something more than any mere complex of possibilities, but it is another thing to deny that, however much more it is, the real must at least conform to the conditions of possibility. If Intellectualism means no more than that an interpretation of life which cannot justify itself before the understanding must be wrong somewhere, it seems to me to be so much of a truth as to be a mere truism. In short, I suspect that Prof. James falls into the error of supposing that logic is a complete and finished science, identical with the actual logical doctrines of Aristotle or some other established authority. How far this is from being the case everyone who has interested himself in the enormous developments of logic within the last generation must be well aware. To declare that facts give the lie to logic because they cannot be adequately represented by the logical categories at the disposal, say, of Aristotle, would be like saying that Physics must be thrown overboard because there are facts which would have seemed paradoxical to the physicist of fifty years ago. Yet Prof. James does not think of arguing that Physics is discredited by the reappearance of the transmutability of metals as a scientific possibility.

To put the case as plainly as I can, Prof. James seems to hold the following curious position: (1) The fate of logic is bound up with the validity of Zeno's famous paradox of Achilles and the tortoise. Logic *proves* that Achilles can never catch the tortoise; experience shows that he catches it in a few seconds; *ergo* logic is futile. Now, I do not know how to reconcile this reasoning, which will be found at pages 254-258 of *A Pluralistic Universe,* with Prof. James's conversion to the doctrine of Bergson, since it is part of the Bergsonian theory, and is announced as such by Prof. James himself, that the "conceptual logic" which both philosophers treat *de haut en bas,* owes its existence to its practical usefulness in enabling us to deal with the geometrical "outside" of things, and thus to compute, *e.g.*, where they will be at any moment, though not to

obtain any insight into their "inner life". If this be the case, it ought to follow that, though "conceptual logic" can give us no clue to the reasons why Achilles cares to race with the tortoise, nor to the feelings of the animal when he finds himself beaten, yet if it says Achilles will always be behind the tortoise, he will as a matter of fact always be behind it. And further, "conceptual logic" does *not* prove that Achilles cannot catch the tortoise; it is for want of adequate logical analysis of the implications of movement that the paradoxical conclusion seems to be proved, and if philosophers have found the refutation of the paradox troublesome, the reason is simply that their logic has been bad. The apparent difficulty arises purely from not seeing that there is a one-to-one correlation between two infinite series of the same ordinal type, one of which (the path of the tortoise, as resolved into a series of positions) forms a proper part of the other (the path of Achilles). The argument, which, as Prof. James seems not to know, was intended as a *reductio ad absurdum* of Pluralism, only looks cogent so long as we suppose a line to consist of a finite number of indivisible unit lines, and is dissipated entirely by the modern arithmetic of the transfinite.[1] Thus the conclusion is only reached by the logically false assumption that $(a+b)>b$ universally holds good when a and b are transfinite. Or, to put it more simply still, all that the argument proves is that Achilles will not overtake the tortoise while it occupies the same position which it occupies at any moment *before* he catches it. Altogether, I would suggest that Prof. James's attack upon "conceptual logic," so far as it rests on this argument, involves a mistake as to the precise nature of the limitations of "descriptive science". Descriptive science does not lead to the false conclusion that Achilles cannot overtake the tortoise; it is merely unable to say how it feels to Achilles to win the race or to the tortoise to lose it. It describes, but it does not interpret. But the limitations of descriptive science are not necessarily limitations of logic. They only become so if you assume, as Bergson and James seem to do, that logic cannot be applied to the study of types of relation which are teleological. In fact, what Prof. James seems to be assuming is that there are no concepts but those of mechanics. But if "good," "evil," "purpose," "attainment," "defeat" are not concepts, then frankly I do not know what a concept is. And once more, I repeat, I find it odd that the philosopher who taught that the Good is the ultimate principle of intelligence, life, and existence itself should be singled out for something almost like abuse as the originator of a type of thinking which shuts us up in a closed circle of bloodless categories.

The same misconceptions seem to me to affect the attack on another of Zeno's arguments, the proof that the tip of the flying arrow is "at rest". In the sense that at any one moment the

[1] See Russell, *Principles of Mathematics*, i., p. 350, for a clear exposition of the whole matter.

arrow-point is at just one position and at no other, this is obviously true. Motion, as we require the notion for science, *is* just the co-ordination of successive positions one-to-one with successive moments, and no more. It is true that the analysis does not interpret the facts by revealing what it feels like to move, but that is not Prof. James's objection to it. He objects to it *as* a description, because it does not tell us *how* the arrow gets from one point to another. In other words, logic is to be dispensed with because it cannot tell us what "becoming is made of," a question which Prof. James and Bergson have equally to leave unanswered for the good reason that it is unmeaning. If we are to get rid of every science which cannot show us how one moment "sprouts out of" its predecessors, what will be left?

(2) Another curious feature of Prof. James's argument is the assumption that any one who refuses to abandon logic, that is, to give up serious thinking, must be committed to the belief that no one thing is really connected with any other thing, or that, at least, no one thing can be related to a third thing, if it is already related to a second. Here again, I profess myself unable to see the consequence, and I suspect that it is only made plausible by the assumption that rigid Monism is the necessary outcome of faith in reason. To be sure, you do arrive at some such strange consequences if you take it for granted, as the Monist *pur sang* does, that the only intelligible kind of connexion is that of subject with predicate, because then it follows at once, first that there can be only one thing, or subject of predication, and next that the predicates of this thing cannot ever be related among themselves, since they are *ex hypothesi* predicates of it, and not of one another. But why is it logical to suppose that the only intelligible relation is connexion of subject with attribute? Or why, seeing there are other types of relation, are they to be excluded from the purview of logic, merely because they cannot be dealt with by the old-fashioned logic of the syllogism? And again, why should the alleged continuity of sensible experience be made a ground for pronouncing logic incapable of dealing with it? Is it meant that a continuum as such lies beyond the power of logic to analyse or define? If it is so meant, the significance of the work of Cantor in defining the number-continuum, the only standard we have of perfect continuity, must be wholly ignored.

(3) Far the most interesting and singular feature of the book, however, is Prof. James's remedy for the philosophical sterility which he finds characteristic of current Oxford thought; and which he puts down to Oxfordian respect for logic, while I should prefer to charge it upon Oxford's sublime indifference to the vaster logic which lies outside the narrow bounds of that doctrine of Syllogism to which Mr. Bradley's successors have returned in spite of his example and precept. The remedy lies in an immediate acceptance of the ideas of M. Bergson. That Prof. James should avow his

personal conversion to the theories of his brilliant younger colleague is, of course, a most interesting fact, but I doubt if his narrative of the way in which he has, for the present, found peace will do much to make acceptance of the new gospel much easier to those of us to whom M. Bergson's own utterances have not brought enlightenment or conviction. To begin with, we are perhaps far from sure that the disjunction "Bergson or an unintelligible Absolute" is a complete one. And in the next place, the directions of Bergson and Prof. James to the neophyte who seeks escape from the body of death of Monism are far from explicit. He is to "dive into" the stream of sensible experience, and he will find it a continuum, in which the artificial "cuts" made by scientific analysis and its conceptual logic vanish, a many-in-one in which every element, because related to every other, "is its own other," as completely as the most fervent Hegelian could wish. In particular, all the difficulties which Prof. James himself, when he was writing what after all, even against his will, remains his master-work, pointed out in the notion of mental states which compound themselves into a single consciousness, will cease to trouble. He will then understand how my sensations and yours can of themselves fuse to form the experience of the "earth-soul," and the experiences of the sun and his planets to form that of the soul of our system, and is even at liberty to think, if he likes, of a God whose consciousness is made by the fusion of all mental states, a regular Neo-Platonic "soul of the whole," though this supreme soul is apparently for Prof. James what an old Greek thinker called the moon, a "corker" in the cosmic boat. In a word, the way will be open to admission of the whole mythology of Fechner.

Now I have myself a great and long-standing admiration of Fechner's mythology, all the more because most of it comes straight out of Prof. James's enemy, Plato, but I am not so sure that I have an equal admiration for the short cut by which Prof. James reaches it. I doubt very much if it is ever the business of philosophy to invent short-circuit routes to its results. "Dive into the stream of sensible experience," says Prof. James, and by this I suppose he means that we are to revert to the stand-point of pure immediate experience, as it is felt before the fatal work of analysis has ever begun. It is his own metaphor that we are to "become as little children" to enter into the kingdom of Truth. But, as I remember, it is also Prof. James's own teaching that the world is to the little child "one big, buzzing, blooming confusion". Is it not reasonable, then, to think that if we mean to reach a view in which the confusion has become something fairly intelligible and communicable to others, we must not merely dive into the stream, but come up again with our report of the pearls we have found at its bottom; we may become little children, if we can, but it should be our aim as philosophers, no less than as Christians, to grow into the stature of the perfect man. What we need is not to do without

concepts, but to supply ourselves with better ones. Moreover, I feel, like Nicodemus, a doubt whether the "new birth" is even possible. Prof. James, at any rate, never seems to have taken his own prescription quite seriously. What he gives us, in the place of Monism, is not pure unanalysed experience, but experience analysed just so far as it commonly is analysed by the ordinary man under the pressure of the immediate practical affairs of life. His "vision" of the world is already one in which relations, though not isolated from their terms (did any sane person ever really perform such a feat of χωρισμός?), are distinguished from them, things distinguished from their qualities and positions, and so forth. He never really gets back to the primitive "buzzing, blooming confusion" at all; if he did, of course, his result would have become too intimately personal to be even communicable. Hence we are left entirely in the dark on the question why analysis should be carried just so far as to yield the kind of view Prof. James wants, but checked the moment it tends to go any farther. As a point of historical justice, it is strange that nothing should be said about the classic effort of Avenarius to construct precisely what Prof. James wants, a philosophy of "pure experience" *minus* all conceptual hypothesis, or about Prof. Ward's criticism of Monism, the results of which must, one would think, be wholly to the author's liking. Perhaps, however, the crime of Avenarius and Ward is that they make the attempt to justify their results to the understanding.

Frankly, I am amazed that Prof. James should imagine that the reality he describes has been purged of conceptual elements and brought back to the state of inarticulate sensation. To begin with, if you take the concrete moment of experience in all its detail, concepts figure in it as constituents no less than sensations. The concepts on which my mind is dwelling as I write these lines are just as much part of the total object present to me as the colours of the trees or the notes of the thrushes of which I am at this moment "marginally" aware. And, to take only the most general term in Prof. James's description of the moment, the word "continuum," if this is not the name of a very complex conception indeed, pray what does it stand for? I do not say a word against the stress laid upon the fact of immediate awareness and its supreme importance, nor do I deny that many of our Oxford thinkers, though emphatically not Mr. Bradley, have gone grievously wrong by trying to "mediate" everything. Nor do I deny that the total moment of immediate experience is incapable of being put together again out of the elements reflection detects in it, just as a living creature is incapable of being made from the "elements" into which the chemist decomposes it. But I do say that philosophy is not life, but reflection upon life, and that the philosopher's business is not simply to live,—that we all have to do,—but to interpret life, and that interpretation without concepts is impossible. Prof.

James speaks, and speaks truly, of the worth of "sympathetic insight" for the interpretation of the life of Nature, but we must not forget that the "insight" is as important in the process as the "sympathy". An Oxford tradition, possibly still existent, used to ascribe to Lewis Nettleship the saying, "How few of us really know what it would be like to be a triangle!" And, one may add, "How few of us know what it would be like to be a daisy, or to be the earth". Meanwhile, if we are to philosophise about the matter, we must at least be in a position to judge which of the conflicting divinations offered for our acceptance shows most "insight". We seem to be in danger just now of a reaction against systematic hard thinking. The demand seems to be for what Prof. James calls a "vision," an imaginative presentation of things which appeals to the emotions, but few seem to care whether the vision has any claim to be accounted veridical. Meanwhile those of us who cling to the conviction that the philosopher at least ought to give some ground for the acceptance of his vision, may at least comfort ourselves with the thought that on our view progress remains possible. We may not enjoy the distinction of the prophet, but we can at least hope that, as the contradictions and illogicalities of our conceptual scheme are realised, the vision of our successors will be clarified. But when logic has been dismissed, lock, stock and barrel, what is left to look for but a succession of "philosophies," like those of the German period of fermentation, each of which displaces its predecessor for no better reason than as this year's fashion, which is no more beautiful nor convenient, throws last year's fashion into the shade, or, I may say, as Prof. James, the great Pluralist, tries to wear the garb of Bergson the Monist, because it is "the newest mode, imported direct from Paris". To vary the phrase, Prof. James seems to me to hunger for the fine flour from God's mills, but to be too impatient of the slow turning of the wheels. And so we find him in his penultimate lecture willing to accept even the Absolute at any rate as a distant connection, provided no *proof* of identity is produced, while in the "last scene of all," we see the Absolute once more dismissed with disgrace, and are left with a plurality of finite "gods," each doing the best he can for himself and his little private state in the "federal republic" which calls itself the Universe, much as another federal republic sometimes arrogates to itself the name America. Yet there are some of us who think that the Federal Republic is not the ideal form of government, and Aristotle, it will be remembered, opted for "one god" on the ground of the advantages of monarchy.

This last lecture, with its undisguised bid for clerical support, suggests some interesting reflections. Prof. James truly says that no philosophy can be on the right lines unless it takes adequate account of our "religious experience". And I suspect that this is actually the real reason why the clergy, as he seems to complain, have not taken his philosophy so seriously as he could wish. Some-

how or other, while I find all that Prof. James writes about religion full of interest, he has always seemed to me not to apprehend the Christian position from the inside and with "sympathetic insight". In the present work, I see no hint that the Christian conception of God means to him anything different from a sentimental variety of Deism, and the clergy, after all, suppose themselves to be Christians. From their point of view, just the all-important point in the relation of God to man, is one on which Prof. James has nothing to say, that God has become man, and that the God-man has "overcome the world". This is what the "gods" of Prof. James have never done; each of them is "limited" by an environment in the face of which he is partly impotent, and which must therefore be regarded as to an unknown extent hostile; he has not "overcome," and there is no guarantee that he ever will. For all that the "vision" gives us, our special "god" may find himself bankrupt at any moment like the President of a South American republic. Nay, it is always in my personal power to make him bankrupt, if I will only doggedly refuse to measure good and evil by his standard. It may be urged that at any rate even so powerless a being, inasmuch as we can be fellow-workers with him, is less of a disappointment to religiously-minded men than the Absolute who has no fellows, and in whose hand we are mere clay in the hands of the potter. But is the disjunction, no God with whom we can have social relations, or a God of the polytheistic stamp, a complete one? The very facts of abnormal psychology to which Prof. James appeals for examples of the "compounding of mental states" seem to me to suggest a third possibility. For what some of them indicate is that while two personalities may both possess a common immediate experience, the total reaction of each on that experience may be different. One "self" may know directly the inmost thoughts and desires of the other, and yet may distinguish itself from that other and dislike or be amused by it.

What if this should be the type of relation between God and other centres of immediate experience? Then the immediate experience of God would include that of each "finite" centre, and yet God might distinguish Himself from each and all, and might, while *e.g.* immediately knowing all my motions of sinful desire, hate their sinfulness with a perfect hatred. God would, indeed, be the All-in-all, but He would not be all, He would have His environment, a social one made up of all other experiences, but it would contain no element of the unknown and unprovided for. The struggle against "the world, the flesh, and the devil" in me would be most fully real, and yet by what theologians call the "grace of God" provision would be made at every moment for the final victory. Such an alternative seems to me at once as legitimate as either of those which Prof. James contemplates, and, from the clerics' point of view, to do much fuller justice to the religious experience which finds expression in the cry, "If God be for us, who can be against

us?" Prof. James seems to forget that the Christian experience of God is not expressed whole and entire in the first article of the Creeds.

Incidentally, let me observe that in his new-found zeal for the "self-compounding of consciousness," Prof. James seems to stretch the principle to cover much that does not fall under it. It is even invoked to explain how A and B can both see the same sun, a fact which is oddly assumed to be unintelligible to the believer in logic. But in this case there is really no question of one mental state figuring as the content of two experiences in virtue of two acts of "self-compounding". A's sensation remains private to A and B's to B, just as A's retina is not B's nor B's retina A's. What is common is the sun which is seen, and this is not a "content" at all, but a physical object perceived *through* sensation. And the "intellectualist" treatment of the matter is quite simple. It consists in observing that there are such things as one-many relations, relations in which one term can stand at once to several. It is really no more contrary to logic that the same sun should be seen by both A and B than it is that the same man should owe money to both of them. Yes, you say, but is not your method of meeting the case as empirical as Prof. James could wish? I own at once that it is, and that all methods are, in the end, empirical. The only way to establish the being of a certain type of relation is to point to examples of it. But an empirical method is one thing, empiricism as a philosophy is another. You are following the empirical method when you establish the fact that there are prime numbers by pointing to 2 or 3 as examples. You would be accepting empiricism as a philosophy if you argued that we cannot be sure that there are not other even primes besides 2, because we have never examined each even number. The contemptuous rejection of logic makes Prof. James not merely a follower of the empirical method but an empiricist.

A word further as to the doctrine of the self-compounding of sensations to which Prof. James now confesses himself a convert. Surely it is an odd thing to give this name to the mere fact that many distinct constituents are present in a total moment of consciousness. As I look out of my window at this moment, I see a number of trees on the opposite side of the lane. But, when I try to analyse the fact, I find no traces of anything which can be called self-compounding. The *trees* do not "compound" themselves, they simply *are* there simultaneously. And my knowledge of their being there does not seem to be "self-compounded" of the individual knowledges of the presence of the separate trees; it is a single knowledge which has all the trees together for its object, an individual attitude of a knower to a complex whole. To drag in the isolated "sensation" as the knower of its own particular object seems to me to be a flagrant example of that abuse of conceptual hypothesis against which Prof. James's book is a prolonged protest.

In the nearest approaches I can make towards the recovery of a primitive experience which is to be all "immediate," I never find myself coming upon a sensation as the knower of anything. It is always I that know, however ill-discriminated the constituents of the known object may be. The very existence of the sensations through whose instrumentality I know seems to me a relatively late conceptual hypothesis which can only be verified by indirect argumentation. And this suggests to me that, from what Prof. James calls an "intellectualist" standpoint, the unity of the one and the many presents no difficulty. The many distinguishable things are one for me so far as I attend to them in one act. That is, they are one in virtue of a teleological principle of subjective interest. Whoever has formed the concept of interest or end, has, it seems to me, already at his disposal a conceptual category exhibiting plurality in unity. (And, in fact, I find that, once more following the much-decried Plato, it is only in virtue of reference to an end, by the light of the "good," that I can conceive of the Universe as one.) I venture to suggest, then, that Prof. James is not really called upon to make his recantation, and to express a hope that he may yet see reason to recall the recantation. To my mind, what he himself admits as a possibly fruitful departure, the reintroduction of the "soul" into our psychological thinking is what is really required to deliver us from the rival phantoms of the All-knower of whom we are merely states, and the sensations which are no one's and yet by "fusion" make a some one to whom they can pretend to belong. This last line of thought surely must end, with every one who has not thrown logic "fairly and squarely overboard," in proving the self to be mere illusion. It would be a singularly urbane instance of the irony of Fate if some such result were to be the last word of Pragmatism.

I have already said so much that I must forbear to add any remarks on Prof. James's Appendices which deal with the important concepts of Relation, Activity and Change. And there are still many topics in the lectures themselves which I have had most unwillingly to pass over. I hope I have at least made it clear that Prof. James has once more given us a book of great interest and fascination, however gravely I may doubt if the line he follows is likely to lead to steady progress towards a truer conception of the world. And I should like to lay emphasis on this last point for a particular reason. There is no charge which "Pragmatists" and "Humanists" are fonder of bringing against the "rationalist" than that of want of faith, unwillingness to believe where we cannot prove. Yet surely there is no nobler or more inspiring faith than the faith in reason itself and the belief which it carries along with it that bit by bit those who seek shall find. No sane rationalist, least of all Plato, has ever thought that he has learned all that there is to be known; his belief is simply that loyalty to reason is the right way to the attainment of truth, and that those who follow

that way after him will get nearer than himself to the light, and may perhaps be helped to do so by his own words and deeds. This may seem a tamer method of progress than the taking of erratic leaps in the dark, but is it not written in the sayings of the wise, *Claudus in via antecedit cursorem extra viam ?*

A. E. Taylor.

National Idealism and a State Church : a Constructive Essay in Religion. By Stanton Coit, Ph.D. London : Williams and Norgate, 1907. Pp. ix, 386.

National Idealism and the Book of Common Prayer : an Essay in Re-interpretation and Revision. By Stanton Coit, Ph.D. London : Williams and Norgate, 1908. Pp. xxv, 467.

It is commonly stated (for instance, by Prof. Watson in his recent important work) that religion includes a creed, a ritual, and a life. Philosophical writers, naturally enough, have usually given their attention mainly to the question of creed, placing life next in importance, and giving very little prominence to the subject of ritual. Dr. Coit has on the whole reversed this order. Ritual stands with him in the forefront, and is considered primarily in its bearing on life ; while the discussion of creed, though by no means absent, is relegated to the background. In a philosophical journal, however, it seems best to observe the usual order. Accordingly, I intend, in this review, to give some account, first of all, of Dr. Coit's creed, then of his general view of life, and only after that to notice briefly what he has to say about ritual. In other words, it is his metaphysical and ethical presuppositions that must claim our chief attention, rather than his application of these to the practical organisation of a church.

A large part of the significance of these books lies of course in the fact that they are a declaration of faith by the recognised leader of the 'ethical movement' in this country ; and they are specially important as an indication of the way in which that movement may be connected with the general development of religious life and thought in our time. They bring out its connexion, not only with the Religion of Humanity and with Agnosticism, with which it is more particularly apt to be associated, but also with some of the more recent lines of growth within the Catholic Church, the Church of England, and the various dissenting bodies ; and, in a more negative way, with Theosophy and Spiritualism. They show, in particular, its close relation to the teaching of Seeley and Matthew Arnold, to the 'Modernists,' to the Broad Church movement, and to what is commonly described as the 'New Theology'. It should be borne in mind, however, that the books are in no sense a manifesto of the ethical societies. Their leading tenets have been hotly assailed by some of those most intimately associated with the work of these societies—especially by Mrs. Gilliland Husband in a critical

notice published in the *Ethical World.* They must, therefore, be accepted only as an expression of Dr. Coit's own view of the essential nature of ethical religion.

The metaphysical presuppositions of Dr. Coit's doctrine are kept so much in the background that it is not altogether easy to bring them clearly into view. It seems doubtful, indeed, whether he has ever quite definitely formulated them to himself. He characterises his own position, somewhat vaguely, as that of 'humanistic idealism'; but there are points at which one cannot but feel a certain suspicion that humanistic idealism, as he understands it, is not very widely removed from naturalistic materialism. He says in one passage (*State Church*, p. 161): 'Atomism, materialism and mechanism, although never for an instant to be denied in the domain of physics and chemistry, are an utter irrelevance in a scheme for the moral redemption of mankind. Morals treat of matters wholly disparate.' If this means merely that atomism, materialism and mechanism are good working hypotheses in physics and chemistry, no objection need be raised to it—though the work of some recent physicists would seem to show that, even for their purposes, these conceptions are in need of some revision. But the statement quoted might be held to carry us somewhat farther. On the whole, however, Dr. Coit's view evidently is that physics and chemistry do not deal with ultimate reality; and that this must be interpreted as mental. 'The universe,' he states, 'does not exist except as it is perceived'; and 'the forms and categories which are the framework of the perceived universe are given to it by the mind itself' (*Common Prayer*, p. 171). He further suggests that the human mind is 'essentially ethical will'; and that, consequently, 'Plato's doctrine of the Good as the ultimate idea' may be accepted as philosophically sound. Such statements might seem to imply that Dr. Coit is an idealist in the sense in which Plato, Hegel, T. H. Green and others were idealists—the sense in which Kant may be regarded as having laid the foundations of modern idealism. But he does not appear to discriminate sufficiently between the doctrine that the universe is what we perceive—or that it is 'experience'—and the doctrine that it is to be interpreted as a system in essential relation to a self-conscious end. The former is subjective or Berkeleyan idealism; whereas the latter is the kind of idealism to which the followers of Kant have been pointing; and the distinction between them is fundamental. Now, I judge, from the general tenor of Dr. Coit's language, that, in spite of his occasional references to Plato and Kant, it is idealism of the former type that he has mainly in his mind—idealism of the type that both Plato and Kant thought they had refuted.[1] His attitude is essentially a subjective one; and this seems to me to be of the utmost importance, as determining the view that he is led to take both of religion and of life. His point

[1] Plato in the *Theætetus* and *Parmenides*, Kant in the *Critique of Pure Reason* ('Refutation of Idealism').

of view in this respect, as well as in some others, might be profitably compared with that of Dr. Rashdall; but indeed the confusion between the two different types of idealism is too wide-spread among our philosophical writers to be made a legitimate subject of complaint in the case of one who is not professedly metaphysical. I need only add that Dr. Coit's constant use of the term 'Humanism' might suggest to some readers a certain affinity with the pragmatists; and he seems, in one passage, at least (*Common Prayer*, p. 171), to recognise such an affinity. But I believe it to be on the whole a superficial affinity. He uses the term 'Humanism' in a wider and, I think, a better sense than that which has recently been made popular; and indeed the general attitude of William James is one of those that he most vigorously attacks. (See especially *State Church*, chap. i.)

At the same time, I must confess that it is not altogether clear to me why he does not go a good deal farther with the pragmatists than he does. If the universe is simply a creation of the human mind, it is hard to see why the human mind should not proceed to transform that creation as it pleases. The really practical course would seem to be that suggested by Omar Khayyám. If we have made the universe somewhat badly, why should we not set ourselves at once to

> 'shatter it to bits, and then
> Remould it nearer to the heart's desire?'

One would like to know what, according to Dr. Coit, is the source of those limitations which cause human life to be always—as he recognises that it is—a struggle of good against evil.

When we pass from Dr. Coit's metaphysical to his more purely ethical presuppositions, we find a somewhat similar indeterminateness; and in this case it is perhaps even more to be regretted. We know, of course, from some of his other writings, that he is a convinced utilitarian; and there is at least one passage in these books (*Common Prayer*, p. 66) in which he gives a slight indication of this fact; but it is a passage in which he states that he has 'not resolved the socially expedient into the happiness-producing; because . . . even if universal happiness be the ultimate goal, there is no practical necessity for exacting a recognition of it'. He contents himself, accordingly, with the vaguer statement, that he takes 'as the universal test or standard of right conduct what might be called the advancement of social welfare'. 'I have assumed,' he says, 'that what is best for the social life, what is well ultimately for the nation, is right'. In another passage (*Common Prayer*, pp. 237-8) this view is explained biologically. 'According to the law of natural selection, it is easy to show that those tribes among whom deeds destructive to the community were applauded and honoured soon became extinct. It is easy to see, on the other hand, that a habit of disinterestedly approving deeds of self-sacrifice for

the general welfare would be a tribal asset of considerable value. And the following summary statement is italicised (*ibid.*, p. 235): '*Only after men have discovered that a line of conduct leads to general prosperity have they called it righteous*'. On the whole, then, we may take it that national prosperity is to be regarded as the ultimate good at which we are to aim; and that prosperity is to be interpreted as meaning the maximum of pleasure. This view I cannot here attempt to discuss. I only note in passing that, while it seems to be thoroughly in harmony with the subjective type of idealism previously referred to, it might be more difficult to reconcile it with the Platonic or Kantian conception of what is ultimately good for man.

Turning now to Dr. Coit's view of religion, we find that he presents us with the following definition—'It is the focussing of men's attention steadfastly and reverently upon some being from which they believe that they have derived the greatest benefits, in order to derive still further benefits' (*State Church*, p. 291). I cannot but think that the word 'reverently' ought to be omitted here, as it is almost synonymous with 'religiously,' and is consequently out of place in a definition. I suggest that we substitute for it some such phrase as 'accompanied by the feelings that are naturally connected with this attitude of mind'. The definition thus given is obviously open to the objection that it identifies religion with a form of self-interest. Some religions are so, and indeed quite frankly so; but it can hardly be supposed that this is true of the highest forms of the religious consciousness. Dr. Coit seeks to guard against this by explaining (especially in the Foreword to *Common Prayer*) that the benefits sought in the highest forms of religion are social benefits. In fact, it is part of his contention that religion, in the only forms in which it has much real significance, is essentially a social phenomenon. The ultimate type of religion, if I understand his view rightly, is that in which the attention of a people is concentrated upon its own highest efforts as the source of national prosperity. The conception of social unity which he thus introduces, and which is accompanied by a running polemic against all forms of individualism, naturally raises the question whether it is quite consistent with the view that the ultimate good for man is pleasure —which is surely an individual feeling. But this is the rock on which all utilitarian theories split; and it would be out of place to do more than call attention to it at this point.

Now, the object of religious devotion is God; for this term means simply (*State Church*, p. 162) 'any Power which has become an object of worship'. It follows that, in the ultimate form of religion, God means the strenuous effort of a nation directed towards its own prosperity—*i.e.*, it would appear, towards the maximum pleasure of the individuals who compose it. Dr. Coit points out that God, thus conceived, may appropriately be represented as a Trinity (*Common Prayer*, chap. v.). For the conception includes the

general principle involved in the effort, the persons by whom the effort is made, and the social organisation through which the efforts of these individuals are sustained. (See, especially, pp. 159-161.) God the Father would thus seem to mean the general idea of human prosperity as the inspiring principle of action; God the Son would mean each individual human being in so far as he participates in such action; while God the Holy Ghost would mean any form of social organisation that is directed to this end—such as a Church or Ethical Society or the Independent Labour Party. These three forms of the divine Dr. Coit regards as equally real and important, but at the same time as inseparable from one another. I think it might be urged, however, that in practice he hardly gives as much importance to God the Son as to the other two. In this respect his view might be contrasted with that of Dr. McTaggart, whose metaphysical position is not really very widely different,[1] but with whom the persistent reality of the individual tends almost to supersede both the unity of the Father and the formative influence of the Holy Ghost. Dr. Coit is peculiarly emphatic in his scorn for any theories of the persistence of human personality. (See, for instance, *Common Prayer*, pp. 107-108.) I am inclined to think that, if he recognised more fully the divinity of the Son, he might be led at the same time to a somewhat fuller recognition of the personality of the Father, and perhaps also to a somewhat less purely socialistic view of the Holy Ghost. But this is only an *obiter dictum*.

It is on these general presuppositions that Dr. Coit bases his conception of a State Church. The discussion of this lies rather outside the scope of a purely philosophical journal; but a few remarks may be permitted. The main points in his conception are easily understood. The need for a democratic basis in Church organisation follows from his general position. *Vox populi vox dei* is for him almost literally true—indeed, it is almost a tautology; but it is true only when we are dealing with the voice of the people acting as a whole, and with its mind concentrated upon the idea of national prosperity. The Church, in particular, when it is organised on a thoroughly democratic basis, is to be regarded as God the Holy Ghost—God engaged, as we might say, in the organisation of His own worship. So far all seems plain enough. When, however, we ask what is the relation between the Church, thus conceived, and the central government of the country, the answer is not so clear. Dr. Coit emphasises, in many places, the close connexion of the Church with education. In one passage, for instance (*State Church*, p. 67), he makes the following statement: 'Any education which is not religious is bad; and any religion which is not educative in an all round and comprehensive sense is false. Elementary schools are the churches of the children, as the churches are the schools of

[1] For he also, as I think, inclines to a somewhat subjective interpretation of Idealism. Of course, I am aware that he prefers to avoid the use of the term God, which he defines differently.

adults. In so far as the organised churches are not instructing the people in science and art as well as in the principles of righteousness, in so far they fall short of being churches. On the other hand, as I have just been saying, in so far as any other bodies are doing true educational work of any kind, they are in so far churches.' It would appear from this that Dr. Coit understands by a church very nearly the same as most other people understand by a university; except that he conceives that university teaching should be connected with an elaborate ritual, leading men to subordinate all their studies to the great end of national prosperity; and that a similar aim should be at the basis of the organisation of the schools. Now, Dr. Coit recognises also (*ibid.*, p. 68) that 'the transference of the control of elementary schools from *ad hoc* governing bodies to county councils and other authorities which are not purely educational,' was a 'retrogressive turn'. It would appear, therefore, that the government of the Church—or, in other words, the government of education—ought to be kept separate from the control of other municipal, national, or imperial affairs. It would be, as it were, a state within the state. Many questions naturally arise in connexion with this, which we cannot here do more than indicate. The first question would be, whether it is right to identify worship with education. Many hold that education, so far as it is organised by the state, should be strictly secular; and even those who think that there should be some religious teaching in state schools would seldom be prepared to urge that it should be all religious. Especially if religion is to mean the concentration of our attention upon national prosperity, it might surely be maintained that there is a legitimate place for a more disinterested love of knowledge and beauty, without any direct reference to this ultimate end. Another question would be, whether it is desirable that all education should be under direct popular control. Dr. Coit seems to think that it is implied in the general principle of social democracy, that everything must be so controlled. (See, especially, *State Church*, p. 193.) Would he insist that even Newspapers should be conducted by the nation as a whole? It is worth noting that some recent Socialists have begun to recognise that, even if most things were brought under the control of a national mechanism, it would still be desirable to leave some things to voluntary control. But I suppose Dr. Coit would say that such socialists are anarchists at heart; and perhaps he would be right. It seems possible to maintain, however, that, while it is the business of the state to provide for its children such an education as is necessary to enable them to become efficient citizens, it is not its business to try to control the development of their individualities or their relations with larger forms of unity than the state itself. But this raises what is perhaps the most fundamental question of all—Is there any real reason why the religious life should be regarded as specially national, rather than cosmopolitan? On this it may be worth while to offer a few observations.

It seems to me to be the most fundamental defect of Dr. Coit's social philosophy, that he identifies the social organism too purely with the state. It was partly this that I had in mind at an earlier point, when I said that his particular type of idealism is not far removed from materialism. A nation struggling for its own prosperity is no doubt somewhat better than an individual engaged upon a similar effort; but it is surely not the highest conception of social unity. It tends, indeed, to become the conception of a social mechanism, rather than that of a social or spiritual organism. The machinery by which a state is bound together does no doubt give it a more apparent unity than that which belongs to any other mode of social relationship; but ties of a more cosmopolitan kind may often be finer, subtler and more truly spiritual. Social democracy itself, to which Dr. Coit is so warmly devoted, is essentially a cosmopolitan movement. So is ethical religion. So is, or was, the Roman Catholic Church. So is Buddhism. Indeed, it might be urged that Dr. Coit's view involves the denial of that unity of the divine on which he himself in some places insists. (See, for instance, *Common Prayer*, p. 164.) The Holy Ghost is surely not to be identified with any one form of social unity. It should rather be interpreted as the underlying significance of social development as a whole. This would, I think, have become more apparent if Dr. Coit had taken a wider view of the history of social evolution, instead of confining his attention in the main to Judaism and Christianity. The Greek philosophers, for instance, tended to think of the social organism in the form of a City State; but it is easy for us, looking back, to see that the Greek City States were contained within the larger unity of the Hellenic nationality, from which some of the best elements of their life were derived, and with which, in particular, their religious ideas were inseparably connected. A modern nation is a larger and more complex whole than a Greek City State; and it is also included within a still larger unity, which tends more and more to become that of the civilised world.

Dr. Coit, however, seeks to bring his view more particularly into relation with the religious consciousness of the Jews; and he is no doubt right in thinking that we have here the supreme instance of a national religion, in which the effort after national prosperity was a leading element. It must be left to experts in Hebrew literature to determine how far such an interpretation of the Jewish religion is complete. To the lay mind I think it will be apt to appear that there are other aspects of it that are hardly less important. Surely the God of the Jews was not merely thought of as the embodiment of their national aspirations, but also in some degree as the maker and ruler of the universe. And indeed Dr. Coit's own philosophy would seem to imply that the human mind, in its efforts after the good, is rightly to be regarded in this way. It is not quite apparent, therefore, why he should seek to minimise this aspect of the Jewish religion, as on the whole he seems to do.

In his estimate of Christianity, again, I am inclined to think that he does not sufficiently recognise the significance of this movement as directed against the purely national conception of religion. The emphasis that it laid on cosmopolitanism, on the one hand, and on the heart and conscience of the individual, on the other, can hardly be properly appreciated from such a point of view as that of Dr. Coit. It is true that some forms of Christianity have taken on the appearance of national religion; but it may be doubted whether its essential spirit can ever be identified with any such forms. It may be doubted also whether any one who is trying to construct the religion of the future—which appears to be Dr. Coit's aim—can afford to overlook other cosmopolitan systems of religion, such as Buddhism. But on these points I cannot here enlarge.

Most of what Dr. Coit has to say on the subject of Ritual is of great interest. The essence of it is, I think, contained in the well-known statements of Hume: 'The ceremonies of the Roman Catholic religion may be considered as instances of the same nature [*i.e.* of the way in which beliefs may be engendered]. The devotees of that superstition usually plead in excuse for the mummeries with which they are upbraided, that they feel the good effect of those external motions, and postures, and actions, in enlivening their devotion and quickening their fervour, which otherwise would decay, if directed entirely to distant and immaterial objects. We shadow out the objects of our faith, say they, in sensible types and images, and render them more present to us by the immediate presence of these types, than it is possible for us to do, merely by an intellectual view and contemplation' (*Inquiry concerning Human Understanding*, sect. v.). Dr. Coit illustrates and emphasises this in many ways, and shows how the general principle may be used in the interests of ethical religion. He seeks also to remove the leading objections that are felt by many to the extensive use of an elaborate ritual. (See, especially, *State Church*, chap. xi.) I am not sure that he is altogether successful in this. It is the very efficacy of ritual that leads many of us to distrust it. It tends to give too great a permanence to beliefs that may have only a transient significance, and too great a definiteness to the gropings of the human mind after truth. I think there is some lack of historical perspective in the emphasis that Dr. Coit lays upon ritual. There have been times in the history of the human race when it was specially important to impress upon men's minds a few simple fundamental beliefs; and this had to be done by means of striking ceremonies, powerful organisations, and definite creeds, even at the risk of stamping in the false along with the true, the transient along with the eternal. Our generation has the task of sifting out these divergent elements; and it may be doubted whether at such a time ritual can have any such part to play as it has had at certain periods in the past. This is not to say, of course, that it ought to be entirely neglected; but only that it must probably be more and more subordinated to the problems of creed and life.

Similar criticisms might be applied to the more detailed elaboration, in the volume dealing with the Book of Common Prayer, of those general principles that are set forth in the earlier book; but I must content myself here with a slight reference to a single point. The treatment of the Ten Commandments is one of the discussions that have most definite philosophical interest. Here the recognised commandments are taken as a basis, and an attempt is made to remodel them in such a way as to make them an expression of the best moral ideas of the present time. Such an attempt has certainly some value; just as there is some value in the effort to use Aristotle's list of virtues as the basis for a more modern classification. But in both cases I think it must be added that the interest of the tables is largely historical. It is interesting to know that there was a time when the Jews found it convenient to sum up the most important duties that were recognised by them in the form of ten commandments; and it is interesting to know that there was a time when the Greeks found it convenient to sum up the most important civic excellences that were recognised by them in the form of lists of virtues. It is also interesting to compare these tables; to criticise them; to consider in what respects they satisfy, and in what respects they fail to satisfy, the requirements of the modern conscience. But, when all this has been done, it surely becomes apparent that neither a list of commandments nor a list of virtues is of very much use to us. It is not in either of these forms that we naturally set before ourselves what is expected of the good citizen. Such compendia would be apt to be more a hindrance than a help to us. In their historical setting they retain a great value; and we may profit greatly by reflexion upon them. But it may be doubted whether it is worth while to remodel them for present use. And somewhat similar remarks apply to most of Dr. Coit's reconstructions. In general, he seems to me to have given too much attention to the effort to revise and reinterpret (in ways that occasionally become almost grotesque) the letter of antique forms, and relatively too little (though, I gladly admit, a good deal) to revive the spirit in which they were made, and to use it as an instrument for the building up of newer kinds of expression.

But I am anxious not to conclude with a note of doubt and disagreement. It is often made a reproach against our British writers, that they do not deal freely and openly with ultimate theological issues. These two books, along with one or two others that have recently appeared, ought to go far to remove this reproach. On theological and religious questions—as distinguished from ultimate metaphysical and ethical presuppositions—Dr. Coit always states exactly what he means, with the utmost clearness and directness. And, even when he is dealing with somewhat ancient creeds, he is always concerned, in reality, with living issues. Subjective Idealism, Humanism, Hedonism, Social Democracy, Moral and Religious Education, the existence of a State Church, the Religion of Human-

ity—all these are problems that are very much alive for us. If few can quite agree with the particular manner in which they are brought together by Dr. Coit, yet the very attempt to bring them together in a coherent way can hardly fail to throw a fresh light upon each of them. And for his moral enthusiasm, the vigour of his style, and the many fresh illustrations that he has collected from various sources, there can be nothing but praise. I cannot believe that a purely humanistic basis for religion can be ultimately satisfactory; but Dr. Coit is certainly one of the most convincing and inspiring of its advocates—partly perhaps because he comes rather near to the transcendence of its limits. If he had thought out a little more fully what is involved in the idealism that he professes, he would speedily have been led to a very different conception both of religion and of morality. But, at any rate, whatever we may think of the value of his conclusions, it may at least be said, with truth, that, in both these books, there is not a dull page from beginning to end.

J. S. MACKENZIE.

What is Pragmatism? By JAMES BISSETT PRATT, Ph.D. Pp. xii, 256. New York: The Macmillan Company, 1909.

THIS book consists of a series of six popular lectures, originally delivered in 1908 at an American "Summer School". As Mr. Pratt explains in his preface, his object has been to produce "a book which (while not presupposing any prior knowledge of the subject) shall present, with some attempt at comprehensiveness and unity, the position of those who find themselves unable to accept the pragmatist view" (pp. ix-x). He also tells us: "When the movement first began I was an enthusiastic pragmatist, and my enthusiasm lasted until I came to understand clearly what it really meant" (p. x). Thus the book presents a novelty to science in that its author is the first known case of a convert *from* pragmatism. But in it we find none of the traditional acrimony of the convert. On the contrary, the book is a model of controversial fairness and good-temper. Nevertheless its perusal yields no clear answer to the question, Why has Mr. Pratt renounced Pragmatism? In part his relapse into a hesitating Intellectualism seems due to his *not* having, after all, quite clearly understood what pragmatists "really mean". But his objections to pragmatism cannot all be regarded as misapprehensions of the actual intentions of pragmatist writers. In part they are due to his persuasion that, whatever the actual aims of real live pragmatists, the ideal pragmatist (of whom Prof. Dewey is apparently the nearest earthly representative) is logically imprisoned in Solipsism, a *Weltanschauung* which Mr. Pratt is doubtless right in regarding as practically untenable. Such a position on the part of a critic is of course by no means indefensible in the abstract. But Mr. Pratt's conclusion that, "if strictly carried

out to its logical conclusions, pragmatism is essentially a philosophy of scepticism" (p. 210), seems hard to reconcile with the concessions he makes to pragmatic theory, and the tribute he pays some of its actual achievements.

"Certain it is that the only truths we know or can know contain *ipso facto* a human element, and that this element cannot be lightly despised. It is in the pointing out of just this fact . . . that the chief merit of pragmatism or humanism lies. . . . We have only sincere admiration for the brilliant exposition given by them [James, Schiller and Dewey] of the contributions which we men make to our own truth" (pp. 56-57).

"Our beliefs are intellectual tools which serve us in more or less useful ways. The process by which they get themselves verified and thus cease to be mere claims and become truths, . . . all this can be traced within the stream of consciousness as concrete psychic fact. . . . The truth is that which works best, and that which works best is the truth. Successful working is thus the tag or ear-mark by which we distinguish the true idea" (pp. 60-62).

"In its attack upon the identification of truth with reality, pragmatism has done a genuine service to the cause of clear thinking" (p. 55).

The difficulty of harmonising Mr. Pratt's commendation and condemnation of pragmatism is enhanced when we observe that what he concedes with one hand he is apt to take back with the other. In the second of the above-quoted passages he speaks of claims *becoming* truths by the process of verification. He even goes so far as to say (p. 87) that "the pragmatist contention that a claim must be verified in order to become 'a truth' is neither novel nor open to any serious criticism". And yet he finishes this last sentence by saying: "But the pragmatist takes it for granted that once this is admitted it follows that the claim is *made true* by being verified and that its trueness consists in its verification". That is to say, he requires us to draw a distinction between "becoming a truth by being verified" and "being made true by being verified".[1] Mr. Pratt's position, so far as we can gather with the help of the explanations given on pages 58-59, is that the pragmatist theory of the relation of "truth" to "working" is so unobjectionable in itself that for the sake of peace he will "agree to define" truth in those terms; while the consequences of accepting that definition are so momentous and so horrible that for the sake of truth he must energetically repudiate the substance of the definition.

In justice, however, to Mr. Pratt, we hasten to add that his defence of unverified truth is by far the weakest thing in the book, and we will not linger over it. He shows to much better controversial advantage in his main line of attack.

"The complete definition of knowledge," he says, "must include something which distinguishes the true from the false, a reference to

[1] *Cf.* p. 59 n., where the confusion seems to reach a climax.

a reality beyond the experience itself which makes it true. . . . Here in fact is the crucial point of the controversy—the pragmatists insisting that knowledge can be sufficiently described and defined without going beyond the experience of the knowing individual; the non-pragmatists maintaining that a reference to something outside of his experience is essential. And, in a sense, the whole problem may be said to hinge on the question of mistaken or false opinion. How will the pragmatist interpret this? The question really is unavoidable: When one is mistaken but satisfied, does he know?" (pp. 164-167). [The prior and really relevant question is, How does A *know* that B *is* mistaken?] "Unless there be transcendence, there is no criterion for judging between two opinions, except, of course, the relative subjective satisfactoriness of the two" (p. 169).

Mr. Pratt hardly goes far enough in saying that "in a sense" the problem turns on the question of discriminating truth from error. Pragmatists have been at pains to point out that this is the really vital issue. But our author fails to see that what we want is not a verbal distinction between truth and error, but an explanation of how mistakes are actually detected and corrected. He has not grasped the really revolutionary character of pragmatist logic; and so has not realised how largely his criticism rests on preconceptions as to the function of logic which pragmatism directly challenges. He would hardly have so missed the real *fundamentum* of the controversy if he had included the writings of Alfred Sidgwick in his study of pragmatist literature.

I repeat that the Sidgwickian attitude in logic amounts to a revolution in that science. For whereas the old, or intellectualist, logic ambitiously inquired into the ideal meaning of "truth" for an *infallible* consciousness, and then contented itself with a merely *formal* answer, pragmatist logic humbly asks, What must be the actual meaning of "truth" for a *fallible* consciousness such as ours? —and then insists on getting a *real* answer. It insists, that is, on knowing how truth and rationality must be conceived, if truth-seeking is to be a rational pursuit *for us*. Nor can it be too much emphasised that the pragmatic identification of truth with usefulness primarily concerns the "truths" of logic as such. Logical "truths," when so "refined" and "abstract" as to be incapable of *utilisation* in the establishment of concrete truths, are of use only to those who make a not too reputable living by teaching them. The humanist may be excused for describing so limited a utility as practical uselessness. And to the question how this kind of practical uselessness is to be distinguished from theoretical meaninglessness no intellectualist philosopher has as yet given an intelligible answer.

For those who like their problems served up in a severely technical form, and look with suspicion on any formulation of the fundamental philosophical problem in which the phrase "possibility of knowledge" does not occur, we humbly submit the problem in

this form: How must Knowledge and Error be defined, in order that (*a*) the possibility of attaining knowledge, and (*b*) liability to error can simultaneously inhere in one and the same mind? Intellectualist philosophers have invariably attempted to frame a conception of "absolute truth" which shall *exclude* all possibility of error *ex officio*. *I.e.*, they have arbitrarily substituted, for the useful distinction between truth and error, a relation of mutual exclusiveness between the possibility of knowledge and the possibility of error—and then they have been naïvely surprised to find that the bare fact of our human liability to error must *ex hypothesi* eternally debar us from attaining to real "knowledge". And as in his capacity of a human being the devotee of "absolute truth" is not himself an incarnation thereof, his logical position would seem to be extremely delicate, not to say perilous. The philosopher who regards truth and infallibility as inseparable must either gain the Whole Truth or be hurled to intellectual perdition. He must either become a Super-Pope or else an utter sceptic.

Such is the dilemma we would oppose to the one in which Mr. Pratt asks us to choose between pragmatism and the principle of contradiction (p. 121). His dilemma would have force only if pragmatism had claimed to possess an infallible criterion of absolute truth—the very thing the proved futility of which has called pragmatism into existence! In fact all that Mr. Pratt's dilemma really proves is that the correspondence-notion is as purely formal as the abstract principle of contradiction itself. The abstract "truth" that A cannot be both B and not-B does not help us to make up our minds as to which of these two A really is. Neither does the correspondence theory. Intellectualism indeed, as a "system of thought," is just the systematic neglect of this question, which the pragmatist's coarsely practical mind insists on regarding as the real problem of logic. Now Mr. Pratt admits that the pragmatic principle *alone* enables us to decide between real alternatives. As the only way of discovering error is by practical failure, so the only *applicable criterion* for distinguishing truth from error is that of experimental success. What meaning then is left in the assertion that the correspondence theory does, and the pragmatic principle does not, "distinguish the true from the false"? Of what use to us is "something which distinguishes the true from the false" *per se*, if it does not enable *us* so to distinguish it?

Ultimately, Mr. Pratt's theory of truth is an attempt to combine two conceptions of "truth" which are not only severally futile, but are also, so far as they have any apparent meaning, of the Kilkenny-cat description when combined. He demands a "truth" which shall be (*a*) "true" of a transcendent "reality," (*b*) theoretically infallible. Now the first demand, while assuming that for truth to exist "reality" must be independent, at the same time defines that independence as *independence of verification*. For if a belief, in order to be "true," must "correspond" with a "reality"

which preserves its independence by remaining *transcendent*, then we can never *know* that it is true, nor can we ever discover it to be false.[1] In short, "transcendence" *means* independence of verification; and that is why we say it has no real meaning at all. *Per contra*, the second demand is one for *absolute verification*. The only thing that these two demands have in common is that neither can justify either the adoption or rejection of any actual assertion about reality. Each therefore "makes knowledge impossible" in the only legitimate sense of that sorely misused expression. That is to say, knowledge, as "theoretically" defined, in practice ceases to be any concern of *ours*. For if "reality" is "independent" (in the sense defined) of our judgments, then, reciprocally, our judgments must be independent of it. In deciding for or against any proffered "truth," we must be guided by something more rational than the vain desire to get in touch with a "reality" which is *ex hypothesi* beyond our reach. If, on the other hand, we are not prepared to face the risk of deciding "wrongly," *i.e.* of having subsequently to change our minds, then we shall do wisely to take up some other occupation than that of thinking. Risk is as inalienable a condition of intellectual as of physical life.

Another objection to which Mr. Pratt attaches importance is that "the test of truth is one thing; the nature of truth is another" (p. 75). Or, as he puts it elsewhere: "The meaning or nature of a material, a quality, a relation, is one thing; the sign by which you make sure of its presence is another. And in like manner . . . the ear-mark by which we have now learned to tell a true idea from a false one [*i.e.* by "successful working"] does not answer the further question, what we mean by its being true" (p. 64). The distinction in question is indeed, as Mr. Pratt says, "obvious," but, in the use he makes of it, it is meaningless. For if *every* condition that justifies our bestowing the name A on a given thing be classed as a mere "tag" of A, what will be left over to constitute the "meaning" of A? The distinction, when taken so absolutely as Mr. Pratt takes it in the case of "truth," becomes a distinction between *all* the nameable characteristics of A on the one side and the unknowable nature of A as a *Ding-an-sich* on the other. The pragmatist's way of avoiding this Charybdis of the Thing-in-itself is to retort that whatever we agree to accept as the *ultimate test* of whether so-called A deserves its name, becomes for us the meaning of that name. Thus an inquiry into the *ultimate applicable criterion* of truth is the sole form that any inquiry into the meaning of truth can take, if that inquiry is itself to have any real meaning.

The charge of Solipsism which Mr. Pratt brings against pragmatism[2] must be dealt with more briefly. Stated as concisely as

[1] *Cf.* Dr. Schiller on "The Rationalistic Conception of Truth" in *Aristot. Soc. Proc.* for 1908-9.

[2] Pp. 121-123 and note. In principle Lecture V. (on "Pragmatism and Religion") is a development of this line of attack.

possible, his argument is this: To identify the concrete truth of an assertion with the experiences which validate it is to reduce all reality —and therefore the reality of other selves—to conscious states of the experiencing individual. It is possible that *Deweyism* may lend itself to this interpretation—except in so far as by minimising the importance of personality it tends to substitute a sort of pan-subjectivism for solipsism. But Prof. Dewey. I apprehend, may well be left to take care of himself. It is noteworthy, though, that our author seeks to fortify his position by quoting a criticism of Dewey on James (pp. 202-203). It is, in fact, quite certain that James and Schiller expressly repudiate the ultra-subjectivist *intentions* which Mr. Pratt attributes to Dewey.[1] And I fail to see why, even if Dewey has overshot the mark, James and Schiller must necessarily be made to suffer for it, or why the good that Mr. Pratt admits is to be found in pragmatism must necessarily come to so bad an end. However, I cannot now do much more than suggest that here again the root of the trouble is that, when pragmatists mention the word "truth," Mr. Pratt's fancy lightly turns to thoughts of infallibility. But, as we have already seen, it is just this identification of truth with infallibility which, while it leads to absolute idealism when one regards one's self as an official mouthpiece of the Infinite, leads to absolute scepticism in one's private capacity as a "finite centre". In fact, as Dr. Schiller has demonstrated, since the Absolute is a Solipsist, in trying to be as like It as we can, we too must become solipsists. If therefore pragmatism also should in the end lead to solipsism, then solipsism must indeed be the Rome to which all philosophical paths converge. But the truth is rather that this Rome, like that other, is a predestined goal only for those who, with hearts set on infallibility, have the intelligence to recognise its incompatibility with the right of private judgment.

Because he has not realised this aspect of the case, Mr. Pratt has misconceived the real nature of the opposition between the correspondence—theory of truth and pragmatism. They are not, as he supposes, conflicting answers to one and the same question. Pragmatism (of the James Schiller variety at least) is not, as he supposes, a denial of the formal relation of "otherness" as between "subject" and "object". It is essentially the determination to substitute the spirit of living, progressive, human truth for the dead formalism of the cult of verbal "exactitude" and dogmatic "finality". We simply deprecate as futile the assuming of a *transcendent and absolute* reality as the standard to which our actual judgments are to "correspond". For (*a*) if an absolute standard were available for actual comparison the comparison itself would be purely superfluous. We should already be *de facto* in possession of absolute and infallible certitude. And (*b*) to say that the reality is transcendent is simply to say that it is *not*

[1] *Cf.* Dr. Schiller on *Solipsism*, in N.S., 70: especially pp. 170-171 and 180 f.

available as a standard at all. We do indeed distinguish, in all our judgments, between the circumambient "reality" and our own private "experience". But, in the first place, this distinction is *within* "experience" in the wider sense; and it is this wider sense which is relevant to pragmatic theory. And, in the second place, the "reality," or environment, that we so distinguish ourselves from, is still reality *as it appears to us;* so that at any given moment our beliefs must be in exact formal correspondence with it. That *this* reality corresponds with our judgments is only another way of saying that it responds to, and keeps step with, every advance in our knowledge. Hence this immanent "reality" avails as little as the unknowable transcendent "reality" to stamp our actual beliefs with finality—though for precisely the opposite reason. Just because it is accessible to thought, it does not itself possess finality. Thus the pragmatic objection to the correspondence-theory is not that we cannot distinguish between ourselves and the environment, whether material or spiritual, to which we consciously react. We insist that this conscious reaction, which is always experimental, is the very marrow of the distinction. Our real objection to the correspondence-theory, in the form in which it is held by Mr. Pratt, is that the "theory" is essentially a confusion between the immanent "reality" which is known, but is not absolute for knowledge nor rigidly indifferent to our purposes, and the "absolute reality" whose transcendence is only another name for unknowableness, and whose stability is only another name for irrelevance to human problems. When philosophers once consent seriously to consider the difference between these two "realities," I am confident that Mr. Pratt will be among the first to be (re)converted to Pragmatism.

HOWARD V. KNOX.

The Religious Teachers of Greece; being Gifford Lectures on Natural Religion delivered at Aberdeen. By JAMES ADAM, Litt.D., Hon. LL.D. of Aberdeen University, Fellow and Senior Tutor of Emmanuel College, Cambridge. Edited, with a Memoir, by his wife, Adela Marion Adam. Edinburgh: T. & T. Clark, 1908.

THE writer of these Lectures, whose early death will be lamented by all who knew anything of him or his writings, was one of those scholars who studied ancient Philosophy in and for itself, and not —after the fashion so prevalent in Oxford—as an introduction to Philosophy in general, an introduction to be interpreted in the light of the modern Philosophy which has grown out of it, even if it is not so interpreted as to be made almost identical with the particular modern system which happens to command the allegiance of the interpreter. But he was very far from regarding ancient Philo-

sophy merely as a matter of antiquarian interest. Very early in life Dr. Adam, as we learn from the beautifully written little memoir prefixed to the Lectures by Mrs. Adam, was fascinated by Plato. Plato became to him not merely his principal interest as a scholar, but a guide for life, an enthusiasm, almost a Religion. Throughout life he might very well have been described as a Christian Platonist. In early days the emphasis would have been very decidedly on the Platonist: later he was, we should gather from the tone of the Lectures, and from the Memoir, more and more impressed by the essential harmony between a liberally interpreted Christianity and the spirit of Plato, though he was far too genuine a scholar to countenance crude and uncritical attempts to make Plato talk Paulinism or St. Paul Platonism.

This attitude of mind was probably a positive advantage in dealing with the particular side of ancient thought which is the subject of the Lectures. The book represents a systematic attempt—critical and yet very sympathetic—to estimate the exact attitude of mind on religious questions of each writer—poet or philosopher—with whom he deals. Though doubtless not unacquainted with the general course of modern philosophic thought, he does not appear at any time to have devoted himself very seriously to modern Philosophy. He was able all the better perhaps to put himself at the point of view of the authors themselves, without being continually tempted (as the scholar who is also a teacher of Philosophy is tempted) to substitute some equivalent taken from modern Philosophy, or some modern development which has arisen out of the doctrine itself, for the doctrine as the ancient author actually held it. He can tell us about Heraclitus without even once holding him up to us as an awful warning against the consequences of Sensationalism, and he can write respectfully and reverently of Plato without explaining away as mere conscious allegory or myth everything in him which presents itself to a modern rationalistic thinker as scientifically or philosophically impossible. In his treatment of the constantly recurring questions how far this or that Platonic conception is to be taken literally, and how far mythically, allegorically or metaphorically, he seems to me invariably to show excellent judgment and sense of proportion. The same sanity of judgment appears in his treatment of the theories of modern scholars about the various questions of interpretation. He is particularly learned in the German and other literature of his subject; he is successful in exhibiting the modicum of truth which each theory contains without being led astray by wild and fanciful speculations.

These remarks may be illustrated by his treatment of the *Timaeus*:—

"For my own part, I think that Plato's emphatic statement about the creation of the world—by which, of course, he means the introduction of order into chaos—is intended to be taken literally, and not figuratively; but the details of the exposition are mythical in the

Platonic sense of the word—an εἰκὼς μῦθος, that is to say, as we may learn, perhaps, from the *Phaedo*, a story about which it may be said, 'This or something like it is true'. The business of a critic of the *Timaeus* should therefore be to separate the underlying principles or ideas from the particular form in which they are expressed; and so far as concerns the subject of these Lectures, I will endeavour, however imperfectly, to perform this task. . . . It would seem, therefore, although this is another of the many disputed questions of Platonic scholarship, that the cosmology of the *Timaeus* is dualistic. . . . The Creator takes in hand the primeval matter, and fashions it, as far as necessity allows, in accordance with the perfect model in his own mind. The details of the narration do not concern us; they are almost entirely *a priori*, poetical, or fanciful. But Plato's cosmology is nevertheless pervaded from beginning to end by one great idea, the importance of which every physicist must recognise, namely, that the world is constructed on mathematical principles. It is by means of 'forms and numbers,' that is to say, mathematical forms and mathematical numbers, that the Creator, who, according to the famous Platonic text preserved by Plutarch, is always playing the mathematician—θεὸς ἀεὶ γεωμετρεῖ—brought order out of chaos. . . . Besides this fundamental principle, the germ of which was already present in pre-Platonic Pythagoreanism, there is another point claiming particular notice in connexion with the cosmology of Plato. I have spoken of Necessity as the power which is responsible for the evil and imperfection of the world. But we must carefully observe that, in proportion as Necessity yields to the persuasion of the Deity, her maleficent influence is held in check. Or, to put the same statement in another form, so far as the primeval chaos submits to be mathematically determined, its inherent ugliness and evil are controlled. It is true, of course, as we have already noticed, that Necessity is sometimes obdurate, and that imperfection always cleaves even to the fairest of created things. . . . No ancient writer has a livelier sense of the beauty and magnificence of the Universe; it shows itself again and again throughout the Platonic writings, more especially in the myths of the *Phaedrus*, the *Phaedo* and the *Republic;* but all the beauty, all the beneficence is of God: whatever is malignant and foul comes from Necessity" (pp. 361-366).

These isolated sentences will, of course, give a very inadequate notion of the author's view, even on this particular point, but they will serve to illustrate his qualities as an interpreter of ancient thought. The sincere Theism of Plato is recognised without any attempt to identify his system of the Universe either with that of Christian Theology or with that of Hegelian or any other modern Idealism. Dr. Adam can point to the element of truth in Plato's theories about numbers, without crediting him with anticipations of the newest discoveries in the modern Philosophy of Mathematics. He tells us simply what he finds in his author without

endeavouring to extract out of him a completely articulated and fully intelligible system in which all difficulties and obscurities, all crudities and inconsistencies, disappear.

Of course, this attitude of mind was not without its limitations. Dr. Adam gives excellent reasons for rejecting the attempt to explain away the familiar criticism that "Plato hypostatised abstract universals," and all that he says in explanation of the process by which he came to do so is eminently true and sensible. But it may be doubted whether Dr. Adam himself fully appreciated the real difficulty of the problem with which Plato was dealing, or the importance of the metaphysical discovery that Plato had made about the part which Universals play in the constitution of knowledge and of reality. If the reader wishes to understand the importance of Plato for modern metaphysics he must consult other writers; but all the same it is likely that he will often get a better impression of what Plato actually thought (if not of the mental process by which he came to think it) from Dr. Adam than he will get from many more metaphysically-minded historians and interpreters of ancient Philosophy. In particular is this true of his account of Plato's religious attitude. One of the best features of the book is the persistency with which he sticks to his subject, and examines other aspects of his authors only sufficiently to make their religious position intelligible. And this is a side of ancient thought which is too much neglected. Even good "Greats" men often, I suspect, leave Oxford with a very hazy or erroneous conception of Plato's religious attitude,—partly because the *Timaeus* is so constantly kept out of sight in what they read or hear about him. But more often, I imagine, well-read classical scholars would find it difficult to give a clear and definite account of what was really thought about the traditional mythology by such a man as Pindar. Mark Patteson has told us that the notion that the pagan worships had died, or were dying out in the first century A.D. is "an illusion created by literature". A similar illusion is often entertained as to the attitude of the educated mind towards Paganism at a much earlier period, though the literature of that period supplies less excuse for it. That Paganism did mean something, even for the very man who was trying to purify it, is one of the conclusions which this book is likely to impress upon its readers. Dr. Adam abstains from drawing morals, or asking what general conclusions as to the history of Religion may be drawn from the intellectual evolution which he chronicles so well. Had he done so, he might perhaps have seen in his own book a valuable body of evidence in favour of the great generalisation of Mark Patteson in the volume of University Sermons from which I have quoted—that the history of ancient Philosophy and that of early Christianity are the history of two parallel attempts to purify Religion from the immoralities with which Paganism had connected it—an attempt which ultimately succeeded through the fusion of the two movements.

Dr. Adam has made his lectures about as interesting as they could well be. He has evidently written them with his eye on his audience and not on the critics with whom he may be for the moment doing battle. His style is remarkably clear and direct. The book is consequently peculiarly suited to students, and will help to give them that sense of the close connexion of ancient Greek literature with old and living Religion, which is often obscured by our very familiarity with the details of a mythology which even in antiquity the more highly educated could not treat quite seriously.

H. RASHDALL.

The Origin and Development of the Moral Ideas. By EDWARD WESTERMARCK, Ph.D. London: Macmillan and Co. Vol. ii., pp. xv, 852.

IT is fitting that all scholars should rejoice when a noble piece of research is carried through by dint of untiring zeal and patience to its appointed end. Dr. Westermarck's labours have been immense, and there is every reason to hope that their effect on moral theory will be proportionate to the energy and skill they so conspicuously evince. It was indeed high time that the trained anthropologist should seek to present in systematic form the actual facts concerning the nature of the moral judgments of mankind. Others who have essayed the task—and they may be counted on the fingers of one hand—have almost without exception been philosophers by profession, whose incursions into the field of ethnological inquiry were inevitably conducted more or less *en amateur*. Nevertheless it is in his capacity of philosopher that Dr. Westermarck must be judged here. But from the purely philosophic point of view there is almost nothing fresh to be said about the present volume, since it but completes the illustration and verification of the principles enunciated in the earlier chapters of its forerunner.

In the interval, however, between the appearance of the first and second instalments of his work, an important ally has come forward to assist in the defence of Dr. Westermarck's central position. Mr. McDougall, in his *Introduction to Social Psychology*, has made out a very strong case for the correlation of emotion with instinct; and that not merely in a vague and general way, but specifically. Sundry prime factors into which even the most complex of our emotional states can be resolved are exhibited as the direct subjective counter-part of organic tendencies implanted in man by natural selection. Mr. McDougall, indeed, arrives at his results by introspective analysis combined with empirical considerations of the psycho-physical rather than of the historical order. He defers to a future occasion the task of showing how far, in the concrete life of mankind, the congenital trend, taken together with its effect—one might almost say its echo—within conscious-

ness, holds its own against less inelastic and fatally determined forces. Consequently we cannot yet tell whether the key he provides will open the door—whether, that is to say, a social psychology which is primarily interested in the emotions and their instinctive basis will actually succeed in explaining the phenomena of society with some approach to comprehensiveness.

Dr. Westermarck, on the other hand, tackles the same problem, as one might say, from its other end. His first object is to record the facts about the moral life of man in all their concreteness. Desirous as he is to pursue a definite line of explanation—indeed, if the will to explain be wanting, description is bound to prove an utter failure—he nevertheless indulges, anthropologist fashion, in a massive treatment of detail that preserves the flavour of genuine history with its rich confusion of elements. As for his explanatory clue, it is Mr. McDougall's; though possibly there is less precision of specific application in proportion as the mastery of the niceties of psychological analysis is less thorough. Dr. Westermarck has read his British moralists carefully, and these, notably such as are of the associationist persuasion, may have helped to suggest to him that the moral ideas might be regarded as primarily the reflexes, as it were, of certain persistent emotions. For the rest, biological analogies, doubtless fortified by his former researches into the history of human marriage, wherein the influence of a well-defined group of powerful instincts was everywhere apparent, led him to connect emotion with instinct, and behold his theoretical groundwork complete. And that Dr. Westermarck adduces a *vera causa*, what psychologist will deny? Call them 'instincts' or what we will, there would certainly appear to exist in man a number of congenital tendencies causing him to respond to this or that type of vital situation in a relatively fixed way, the accompanying emotions, images, and ideas seeming, in extreme cases at all events, to be without modifying influence, like bubbles on the surface of a stream.

What, however, of those conditions of moral development which do appear to exert a modifying effect, namely the forces that manifest themselves in economics, law, religion, philosophic reflexion, and so forth? Dr. Westermarck does not neglect them. The general scheme of his work, indeed, tends to emphasise the general uniformity of the moral nature of man. He sets out in the first instance to compare, not types of concrete social life, but types of sentiment. Naturally he finds on all sides evidence of a certain similarity of moral approval and disapproval; but of the actual effectiveness of such feelings, of their power to hold their own under the stress of practical life, he—or at least his reader—is scarcely able to judge. On the other hand, so far as dissimilarities and differences in moral sentiment present themselves in the course of his investigation, he endeavours to deal with them faithfully. It is especially to be noted how, by carrying his inquiry right through from savagery, the special province of the anthropologist,

to civilisation with its endless complexities, the province of the historian of culture, he has been able to realise what a thinker of biological proclivities might be tempted to ignore, namely the enormous importance of reflexion as a factor in moral progress. As he says, "Though moral ideas are based upon emotions, though all moral concepts are essentially generalisations of tendencies in certain phenomena to call forth moral approval or disapproval, the influence of intellectual considerations upon moral judgments is naturally very great". He goes on to prophesy that in the future the influence of reflexion upon moral judgments will steadily increase, and that correspondingly the influence of sentimental antipathies and likings will diminish.

When this qualification (as it might almost be called) is borne in mind, there will be the less unwillingness on the part of philosophers, who as such are disposed to exalt the function of philosophic reflexion, to accept the fundamental thesis propounded by Dr. Westermarck. That thesis, is will be remembered, consists in two closely connected propositions; firstly, that the moral judgments of mankind have an emotional basis; secondly, that the moral emotions are specifically of a 'retributive' type, that is, are akin to gratitude and revenge. Dr. Westermarck claims that no other theory of the moral consciousness has ever been subjected to an equally comprehensive test; and, if by 'test' we are to understand an appeal to evidence of the historico-psychological order, that claim may surely be allowed. Now a doctrine which insists that the motive springs of human conduct are in large measure the same all the world over, if rightly interpreted, is full of hope for man, in that it invites all to participate in the fruits of the best life as achieved by the most truly progressive portion of mankind. Such a doctrine, however, might easily be twisted into a misology, a glorification of the 'noble savage'; or again might result in a view of history 'through the wrong end of the telescope,' that is to say, with the significance of the change from barbarism to culture not so much travestied as simply dwarfed and minimised. Dr. Westermarck, however, gives instinct its due without being therefore unfair to reason. Perhaps rationalistic philosophers in the future may be led to imitate his impartiality, and to allow that a 'pure' thought, cut off altogether from its emotional basis, must be morally impotent. Certain it is that academic moralists would be the better for some knowledge about the moral life of mankind at large, and that they will get this, as nowhere else, in the pages of Dr. Westermarck.

R. R. MARETT.

Hegel's Educational Theory and Practice. By MILLICENT MACKENZIE. Swan Sonnenschein, 1909. Pp. xxi, 192.

THERE are no more striking passages in the recently issued Poor Law Reports than those which deal with the defects of our present

educational system with respect to adolescence. They naturally press the question on us from the side of boy labour. But the same problem is brought home to us from other sides. There is the Workers' Educational Association demanding a higher type of education than that which ends at fourteen. Even in connexion with our secondary and public schools we are beginning to realise that their boasted effect upon 'character' is of very limited extent and makes for a narrow type. As Mr. Wells puts it the ordinary boy doesn't adolesce, he stumbles unprepared on the problems of adolescence. In spite of some recent exceptions such as Dr. Stanley Hall's book upon the subject, educational theory has hitherto given us little guidance in this all-important subject. It has been occupied mainly with the study of childhood. Its achievements here cannot be overestimated. It has been guided by the true insight that the object of education at this stage is the appropriation by the child through sense, feeling, imitation and creative effort of the contents of the natural and social worlds that surround it. Educational writers are now commencing to feel that this is only the beginning of education. To such properly called primary education there has to be added a secondary, whether we call it by that name or not. Its aim differs from the earlier as self-consciousness differs from simple consciousness. It starts from the division and possibility of conflict between the merely natural and the moral or spiritual. In opposition to instinct, sense and habit stands the world of social relations, thought and imagination. With this new world the youth has to come to terms. He has to find his place in it by winning for himself the power of moral self-control, of self-directed attention, of contributing through a self-chosen industry or profession to the contents of its life. What is wanted is orientation in a world of social relations and of ideas which is at once above, yet a continuation of what has gone before. A system of education which fails of this and leaves large masses of the population in the condition of children, morally, intellectually, industrially and politically, is self-condemned. It is like a system of horticulture that takes much pains with the planting and drilling of the seeds and early plants, but for the rest leaves them to find their way into the sunshine and struggle with weeds and a damp surface soil as best they may. It is this orientation which is the central educational problem of our own time on which we need all available light from educational theory.

For this reason we give a hearty welcome to Professor Millicent Mackenzie's book on *Hegel's Educational Theory and Practice*. It appears some years after Dr. Luqueer's *Hegel as Educator* (which is perhaps partly responsible for the recent interest in adolescent education in America, though it has had little influence in this country), but is all the more valuable because it has been conceived and written independently of it. What makes Mrs. Mackenzie's book particularly timely is that the problem as above stated is precisely that with which Hegel in his educational work as Rector of

the Nürnberg Gymnasium was constantly occupied. To him as to Plato education meant freedom not only from natural passion and desire but from the merely natural and habitual however innocent. Freedom he held to be the essential quality of the mind as weight is of solid bodies. "Pedagogy is the art of making men moral: it regards man as one with nature and points out the way in which he may be born again, in which his first nature may be changed into a second—a spiritual nature—in such a way that the spiritual nature may become habitual to him." What is characteristic of himself is his mode of conceiving the transition from the natural to the spiritual as a process of self-estrangement and self-recovery. As he expressed it in his own *Phenomenology,* which was written at this time, the soul must break away from its own substance and re-enter it as something foreign to itself. The boy's love of adventure is only a sign of this deeper unrest. "It is a necessary self-deception that depth must first of all be sought in the form of distance." Youth seeks for happiness in leaving the familiar and occupying with Robinson Crusoe a remote island. But this "centrifugal force," like the childish love of adventure with which he compares it, if left to itself is apt to waste its energy in vague wandering from the beaten and familiar. The soul is apt to seek for the depth which is its birthright in mere distance from its early innocence and the life of habit and convention—not only sowing but reaping its wild oats. It is here that the teacher comes in. It is the business of the teacher to conduct it to a world where there will be ample scope for effort and adventure, but where the effort will be disciplined and the adventure will nourish and strengthen, building up a new self which is not merely the destruction of the old. The end is a moral one in the widest sense of the word, the appropriation of moral ideas, the concept of right, but it is achieved through what is in the first instance an intellectual training. There is no opposition between the moral and the intellectual. "To have the concept of right one must be educated to the stage of thinking and not linger in the *régime* of that merely which appeals to the senses." Virtue is knowledge: "if youth but knew".

On the question of the choice of studies Hegel was the rector of a classical gymnasium and naturally emphasises the place of the classics in effecting this vital change. The classics and especially Greek have the power of most effectively securing this break between sense experience and the world of thought and imagination and at the same time of giving the mind back to itself. The study of them necessarily starts from grammar and than grammar "nothing intellectual is more comprehensible"; they contain the best concrete examples of the civic spirit; while for beauty they are "the paradise of the human mind"; their dramatic and philosophical literature offers a basis for moral and religious instruction and the beginnings of philosophy. But he was no doctrinaire in all this, and on occasion emphasises the power of the 'new world' of mathematics and

physical science to serve the same end. Had he lived now he would doubtless have had much to say on the place of German history and literature.

All this and much that is subsidiary to the central idea Mrs. Mackenzie's book sets out in three excellently conceived sections, the first dealing with Hegel's life as a teacher, the second with his contributions to the theory of education, the third consisting of extracts from his *School Addresses* on classical studies, discipline, military exercise, moral education, study and character-building and other subjects of which we are beginning to hear a good deal and are likely to hear more in connexion with our own system of public education. The writer hints that it is the absence of any settled principles on these subjects that is the cause of much of our educational unrest at the present time and was her own motive in undertaking this book. "To many of course the Herbartian philosophy appeals, but for the large and increasing number of those who fail to find full satisfaction therein it may be that the Hegelian philosophy will be found to provide that which they have vainly sought elsewhere." Yet it is a discriminating educational Hegelianism that is recommended. One of the best chapters is on Some Difficulties of the Hegelian point of view. When she has given us so much it would be ungrateful to ask for more. What one misses and hopes that the writer will supply in a subsequent edition is a chapter on the applicability of Hegel's main aim and methods to the problem of our own time, which has little apparent resemblance to that of the Nürnberg High School of 1810. Meantime perhaps we may take a hint from Hegel himself as to what the answer to such a question might be. He complains, as we have seen, that it is a natural fallacy to seek for depth through distance. The object is depth and deep calls to deep. What is wanted to deepen character in the nation is not something remote in time and place but a deeper hold of the kind of knowledge, whether scientific, imaginative, practical or religious, which the ordinary school curriculum has already begun under carefully trained teachers to supply. We are beginning to realise that it is possible to go through the best classical training at school and at college and miss just those fruits which Hegel claims for it and knew doubtless himself how to reap. On the other hand we are beginning to realise that there is not one of them which the literature and history, the art and religion and philosophy of our own country may not be made, when properly handled, to produce even more abundantly.

J. H. Muirhead.

VII.—NEW BOOKS.

Aristotle's Criticisms of Plato. By J. M. Watson. Henry Frowde, Oxford University Press, 1909. Pp. 88.

There are obvious reasons why it would be improper to subject the present essay to such criticism as would be appropriate in the case of a "work" published deliberately after receiving its author's final revision. The writer, who composed it in its present form as a Fellowship dissertation, died, unhappily for classical scholarship, very young, and before he had the opportunity to develop what he had written into a mature treatise. Hence, as Prof. Burnet says in his introductory note, there are indications scattered through the essay of a view of Platonism and Aristotle's relation to it very different from that taken in the pamphlet as it actually stands.

I think it most becoming, therefore, to treat the essay in the main as a monument of the acuteness and ability of a youth of great promise prematurely lost to us, and to do little more than call the attention of lovers of Plato to his work as presenting at least a clear and penetrating analysis of the problems to be solved in forming an opinion on the value of Aristotle as an interpreter of his master. In the main, one is, I think, bound to come to Mr. Watson's conclusion that Aristotle is at least to be absolved from the imputation of bad faith in his account of what Plato taught, though it is, to my mind, quite another question whether he fully understood what he reports to us. As to the question of his accuracy about positive facts, I should, indeed, go further than Mr. Watson does. I believe *e.g.* that subsequent study, had Mr. Watson's life been spared, would have led him to see that Aristotle is absolutely correct on two points where Mr. Watson, like the Cambridge school against whom some of his most telling criticisms are directed, decides to reject his evidence. Careful study of the *Timæus* and the other dialogues of Plato's old age will, I believe, make it certain that Aristotle is quite right in saying that Plato seriously taught both that the κόσμος is γενητός and that the earth moves. On the other hand, while it is a distinguishing merit in the author to have taken full account of the value of M. Milhaud's work, I cannot feel that he is justified in opposing his conclusions on the ground that Aristotle *cannot* have been so deficient in mathematics as M. Milhaud requires us to suppose. If Aristotle was really abreast of the mathematical science of his times, we may ask, how comes he to show no acquaintance with the development of the doctrine of incommensurables by Theætetus or the theory of proportion as worked out by Eudoxus? How is it, again, that he shows no appreciation of the application of the method of exhaustion to the finding of curvilinear areas, or that when he talks about the "quadrature" he ignores the remarkable discovery of the τετραγωνίζουσα by Hippias, and never, so far as I know, seems to be aware of the numerous investigations of properties of curves other than the circle which had occupied Pythagorean and Platonist mathematicians?

How, again, are we to explain the standing confusion which vitiates book *M* of the *Metaphysics* between three such different things as (1) the Variable, or ἀόριστος δύας, (2) the number 2, the αὐτόδυας, (3) a *pair* of things? I cannot rate very highly the mathematical thought of a philosopher who does not understand that though there are countless pairs of things, there is only *one* number 2, and thinks that the number 2 is a collection of two "numbers 1," because a pair of things is a collection of two things.

The fundamental assumption which seems to me to have prevented the author from putting matters in the right light, is the current belief that Plato invented the εἴδη, and that there is consequently an "earlier" Platonic doctrine represented *e.g.* by the *Phædo*, and a "later" Platonism which begins with the *Parmenides*. It is then argued that the *Parmenides* is a recantation of the *Phædo*, and we get involved in the problem, with which the author wrestles very bravely, whether Aristotle means to attack the "earlier" or the "later" doctrine. Since his main polemic is against the εἰδητικοὶ ἀριθμοί, it then becomes hard, though Mr. Watson does it, to acquit Aristotle of bad faith in mixing up with this polemic arguments only applicable to the supposedly disavowed "earlier" doctrine of the *Phædo*. Further, the theory requires us to manufacture a history of the Academy after Plato for which there is no evidence, and which is out of keeping with all that we positively know about Plato's pupils. In my own view, the only way out of this insoluble difficulty is to recognise, what the text of both Aristotle and Plato properly read implies, that the doctrine of the *Phædo* is not specifically Platonic at all, but a faithful presentment of the views current in the Socratic circle generally at the end of the fifth century. There is no recantation in the *Parmenides*, because there was nothing to recant. Aristotle's attacks on εἴδη are by no means always to be taken as aimed specially at Plato; they concern *all* the "friends of forms," of whom the Platonists were a special section, distinguished by their identification of the "forms" with ἀριθμοὶ ἀσύμβλητοι, and in particular, when Aristotle contrasts "those who first said there are εἴδη" with those who added that the εἴδη are "numbers," he means to contrast Plato neither with himself at a later date, nor with his followers, but with his predecessors. From this point of view, the *Parmenides* ceases to be the hopeless puzzle which Mr. Watson rightly pronounces it to be when interpreted on the assumption that it represents the turning-point in Plato's career, and contains a "recantation," or is addressed to disciples who were unwilling to follow their master in pulling to pieces the edifice of his "early" philosophy. The dialogue is, in fact, like all Plato's dialogues, intensely dramatic, and deals neither with the views of its author nor with those of Aristotle, but with an historical situation which had long passed away when the Academy came into existence. Its real object is to show at once the impossibility of such a theory of reality as was maintained by the εἰδῶν φίλοι of the *Sophistes* (persons who are there carefully presented as contemporaries and acquaintances of the "stranger from Elea," and must therefore be sought among the Eleatic and Pythagorean friends of Socrates), and partly to point out the conditions which a satisfactory doctrine of μέθεξις has to satisfy. There is no need whatever to suppose, what is in itself unlikely, that it has any particular connexion with the studies of Plato's pupils in the Academy.

As for the problem of the εἴδη τικοὶ ἀριθμοί, Mr. Watson is clearly right in holding that the doctrine, whatever it meant, was actually taught by Plato; had he been spared, further acquaintance with the modern philosophy of number would probably have made its general meaning clear to him, with the result that he would have had to revise his views on the quality of Aristotle's mathematics. For the understanding of the whole

matter, a study of one or two such works as Frege's *Grundgesetze der Arithmetik* or Peano's *Formulaire* is perhaps the most indispensable preparation. The "arithmetisation" of geometry, which seems to be an actual achievement of recent mathematical theory, is quite in the line of Plato's thought, and is exactly the kind of advance which Aristotle tried to cut short by the arbitrary assertion of the irreducible difference between the provinces of the two sciences. Here I will only make one suggestion. So far from the "numbers which are the Ideas" being creatures of paradox, they are the inevitable last word of the theory of εἴδη, for the simple reason that the εἶδος itself is, in all likelihood, the lineal descendant of the "patterns" by the aid of which the Pythagoreans investigated the properties of the figurate numbers. The εἶδος ended as a number because it began as one. I cannot here produce the proof of this suggestion, but it seems to me at any rate a "probable hypothesis". As a final remark, I would say that I am sorry that Mr. Watson should have repeatedly contrasted what he regards as the absence of personal irreverence and ingratitude from Aristotle's criticism with its alleged presence in Leibniz's criticism of Spinoza. We now know, though Mr. Watson could not have done, that Leibniz was never a Spinozist at all, and therefore lay under no special obligation to deal tenderly with Spinoza's memory. And I will add that, to my own mind as to that of others whose judgment is entitled to carry more weight, Leibniz's critique of Spinozism is, as Aristotle's critique of Plato has always been felt not to be, absolutely and finally annihilating. "Spinoza would be in the right if there were no monads" is no more than an unadorned statement of the simple fact.

A. E. Taylor.

Scholasticism Old and New. By M. de Wulf. Translated by P. Coffey, D.Ph. Dublin: M. H. Gill & Son, 1907.

This book is an outcome of the movement called Neo-Scholasticism, which has its principal seat in the Institut Supérieur de Philosophie or École S. Thomas d'Aquin, founded at Louvain under the auspices of Pope Leo XIII. This Institute is not to be identified with the Philosophical Faculty of the University of Louvain, its relation to which is described on page 289 of this volume as that of a 'special school or department'. So far as a very superficial acquaintance with this movement enables me to judge, it represents an attempt to bring the new knowledge of the universe gained since the middle ages, chiefly through the progress of the natural sciences, within the lines laid down by St. Thomas Aquinas, without departing, as 'Modernism' in all its forms would do, from the general philosophical attitude of the great Schoolmen. While Modernists claim to occupy as regards the relation of Catholic dogma to modern philosophy a position analogous to that which St. Thomas and his immediate predecessors occupied as regards the relation of Catholic dogma to the revived Aristotelianism of their day and its Averroistic development—and, for that very reason, demand a new synthesis instead of that elaborated by St. Thomas—the Neo-Scholastics hold that St. Thomas's synthesis itself will be found adequate to do again in our days what it did in his, and to take in all that is valuable in the knowledge gathered by later generations. It is characteristic that the energies of Neo-Scholastics should be directed rather to research in the experimental sciences than, like those of the Modernists, to historical criticism and a consequential reconstruction of the theory of knowledge. For the experimental sciences can be carried on up to a certain point with enthusiasm and success by men who, however personally religious, are

disinclined through the very habits of mind which make them proficient in the studies of their choice to probe the history of their religion or indulge philosophic doubts as to the ultimate significance of its dogmatic system. The first Rector and the present patron of the 'School of St. Thomas' at Louvain is Cardinal Mercier, Archbishop of Malines, himself an exponent of Neo-Scholastic ontology and psychology, whose ill-informed charge against Modernism called forth an incisive rejoinder from the lamented Father Tyrrell under the title of *Mediævalism*. The greater sympathy of the Neo-Scholastics with experimental research than with the historical criticism cultivated by the Modernists finds an English parallel in the late Dr. Pusey's readiness to promote the beginnings of the Museum at Oxford, while remaining the uncompromising antagonist of the methods and conclusions of the new Biblical criticism of his time.

More interesting than M. de Wulf's own book is the account of the studies of the Louvain Institute which is added by the translator, Dr. Coffey of Maynooth. It must be admitted that when one reads (on p. 293) that the instruction in the History of Philosophy is entrusted to M. de Wulf, no great confidence in the character of that instruction will be felt by those who read the *Histoire de la Philosophie Médiévale*, reviewed by the present writer in MIND, N.S., 35, page 411; nor will the eulogies pronounced upon the same professor on page 302 raise their opinion of Dr. Coffey's fitness to appraise a course of philosophical studies. And when we turn in the present volume from Dr. Coffey to M. de Wulf himself, there is nothing to lead us to revise the unfavourable judgment which we were compelled to pass upon the latter's earlier work. It is true that the section on Neo-Scholasticism and History displays a scholarly and enlightened spirit; indeed the translator here (p. 197 n.) grows uneasy at his author's tendency to admit the compatibility of Catholicism with more than one philosophical system. But one gathers from the book a general impression of second-hand work. Thus Bacon and Leibnitz seem to be quoted at second-hand (pp. 28, 152); Bernard of Chartres' saying about our being dwarfs who stand on the shoulders of giants, M. de Wulf (although a professed student of mediæval philosophy) seems to attribute to a thirteenth century scholastic and quotes from a modern writer; and, whereas it is merely a commonplace to say that Scholasticism deserted Aristotle when his teaching conflicted with that of the Church, M. de Wulf, without any reference to this obvious interpretation of the fact with which he is dealing, claims that what he calls a '*new* theory' (of the survival of the whole soul) 'put forth against the erroneous or misleading statements of Aristotle' (as to the immortality of the νοῦς) 'should of itself suffice to vindicate Scholasticism from the charge of undue servility to tradition in the department of psychology'. The general attitude taken up by M. de Wulf towards mediæval philosophy is indeed incompatible with a free and objective study of its history. For M. de Wulf scholastic philosophy is a 'philosophical synthesis common to a group of the leading doctors of the West' in the middle ages: among whom St. Anselm, Alexander of Hales, St. Thomas, St. Bonaventura, Duns Scotus, Occam are especially named. Any mediæval thinker who transgressed the (doubtless comprehensive) bounds of this 'synthesis,' such as Raymond Lully or Roger Bacon, is for M. de Wulf a 'rash disciple' who has 'tarnished the purity' of Scholasticism. Again, despite his reasoning against proposals to *define* Scholasticism as a 'philosophy in harmony with theological dogma,' M. de Wulf's assumption of a tied theology reacts upon his view of philosophy which for him is also tied so far as it touches on points where theology is tied; *e.g.* on 'the notions of person and nature' (see p. 62).

Not only is M. de Wulf's general attitude one which is scarcely com-

patible with a satisfactory treatment of his subject, but we find in him a slowness to grasp the meaning of those whom he criticises, and an unsureness of touch in dealing with the details of his subject, which make it impossible to regard him as sufficiently qualified for the task which he has set himself. Of the former defect his remarks on page 16 on the extension given to the word "scholasticism" by M. Picavet are a fair example; of the second the mysterious reference to Plutarch on page 140 which is difficult to understand unless we suppose that the author (who is certainly acquainted with John of Salisbury's *Policraticus*) has no misgivings concerning the attribution of the *Institutio Trajani* to the philosopher of Chæronea. It would perhaps be hypercritical to object to the omission on page 83 of any reference to the true origin of the word *Metaphysics*, did not other passages such as that on page 121 where the Aristotelian doctrine of the unmoved movers of the spheres is oddly described in words taken from a French work by a M. Piat, and without anything to suggest knowledge on M. de Wulf's part of the original; or that on page 122 where a particular distinction is described as mediæval without a hint that it was derived from Aristotle; all suggest that M. de Wulf is still as little at home in ancient philosophy (the history of which he professes) as when he wrote his earlier work. Nor can students of the history of modern philosophy (which he also professes) obtain much trustworthy guidance from the author of the remarks concerning Hegel on page 216, and of those concerning Kant on page 237.

The proofs of the translation might have been better corrected; thus on page 20 we meet with a certain *Bœthius;* on page 254 'former' and 'latter' have apparently been transposed; and in a note on page 261 'Aristote' is credited with the authorship of a work of M. Boutroux's.

C. C. J. Webb.

Text-book of Experimental Psychology. By Dr. C. S. Myers. London: Edward Arnold, 1909. Pp. 432.

This is a book of exceptional interest in many ways. It is meant especially for the student of psychology who has mastered some elementary text-book like Stout's *Groundwork*, has learnt something of the structure and function of the nervous system, and turns to grapple with the mysteries of "experimental psychology". Keenly he soon feels, as the author remarks, the lack of a text-book: "the literature on the subject is now so scattered and so profuse, that a student must have at his command a small library of books and periodicals if he wishes to pursue a course of independent reading".

A relatively large portion of the book is devoted to the field of sensation. One short but excellent chapter on the cutaneous and visceral sensations has had the advantage of assistance from Dr. Head, who is making such a revolution in our knowledge and conceptions on this subject. Two chapters are given to Sound, a topic which the author has long marked as peculiarly his own by numerous researches; they conclude with a masterly summing up of the rival theories of hearing proposed by Helmholtz, Rutherford, Ewald, and Meyer, the final verdict being that for the present "we can only hold a suspended judgment". A similar amount of space is allotted to the visual sensations, and here again one is particularly struck by the lucidity and fairness with which the chief conflicting theories are compared and criticised, those of Young and McDougall on the one hand and of Hering and Muller on the other. Most noticeable among the remaining sensory themes is the thorny one of spatial perception. The interesting suggestion is advanced that the

influence of 'local signs' on the spatial threshold is not simple but complex: "There are better reasons for supposing that a given point of the skin, when stimulated, evokes not only its own local sign but also to a less extent the local signs of neighbouring points; and that the degree to which the latter are evoked decreases with their distance from their point of stimulation, and possibly with a delicacy of the local signature in the district". But this and all future speculations on the matter will have to take into reckoning the remarkable discovery of Head and Rivers, that the spatial threshold and the tactual sensitivity depend on opposite sides of the spinal cord. In the chapter on "Labyrinthine and Motor Sensations" we find the time-honoured view. that awareness of position is an inference from conscious sensations in the joints; but this view, so natural logically, scarcely finds support in recent empirical investigations (for instance, that of Rupp, *Z. f. Psych. u. Phys.*, Abt. II., vol. 41).

The intellectual processes have been treated, on the whole, less generously. Great and deserved prominence is given to the work on Memory by Ebbinghaus and by Müller; this should prove very convenient to the numerous students who cannot easily cope with the original papers of these authors. Also Müller's important investigation of the process of comparing weights is well emphasised. A great deal of useful information has been collected together in a chapter on "Muscular and Mental Work". The investigation of the higher intellectual processes, particularly by Külpe's school, is not touched on; no space is allotted to Suggestibility or to Testimony; nor could room be found for experimental work on children, primitive races (though the author himself has taken an important share in this), animals, or abnormal states.

The emotional and volitional processes also have had to suffer great condensation. In this field again the reader will derive profit from Dr. Myers' power of dealing with conflicting evidence. We are introduced to the new word 'empathy,' a valuable translation suggested by Ward for the German Einfühlung.

The chapter on "Statistics," brief as it is, shows marked advance on anything of the sort in previous psychological text-books. The practical exercises are numerous, judiciously chosen, concisely described, and well illustrated. Further study is facilitated by an excellent bibliography at the end of each chapter. There are many things out of the book that one would like to see in it, but it would be very hard to find any case of the converse. The whole is stamped with a rare 'objectivity'; psychologists have a great tendency to depict facts 'as seen through a temperament,' but the author's mode of presentation is one of simple transparency.

Admirable as is the manner in which he has fulfilled his task, carping criticism may yet find something to urge against the task itself. The object of the book is double: first, to describe the methods and principles of psychological experiment; and second, to set forth its most important results. It is the first of these alone that is usually understood abroad under the name of experimental psychology, and this unquestionably constitutes a special department of knowledge: while every educated person ought to learn something about the mental processes, only a few need trouble themselves with the details of experimentation. There are already several good foreign manuals on this subject in existence, but we have the pleasure of finding that this British one is better still.

When however we consider the second object of the book, that of giving a summary of the most important experimental results, we cannot help being impressed by the fact that it has hitherto found no favour among the leaders of the science; throughout the world it has been felt that to make different books of the results obtained by the different methods is about as profitable as to investigate the function of one leg

apart from that of the other. In England psychology has developed under peculiar conditions. The experimental method has met with exceedingly strong opposition. Debarred from developing in conjunction with the older methods, it has been forced to start an independent existence. At this moment we have the common spectacle of the so-called 'general' psychology belonging to one academic department while the 'experimental' part falls to another. Thus this fundamental biological science, which is to educate our children, to diagnose their proper vocations in the state, to treat mental disorders, to prevent crime, to rationalise legal procedure, to furnish a solid basis for social reform, to cultivate art, to give light and new force to religion—this Psychology we have rudely cut in twain, *ὥσπερ οἱ τὰ ὄα τεμνοντες καὶ μέλλοντες ταριχεύειν, ἢ ὥσπερ οἱ τὰ ὠὰ ταῖς θριξίν*. Each mutilated and meaningless half has its separate position in the University and its own examinations. And the examinees want text-books. Luckily Dr. Myers has not taken this side of his task so earnestly as to interfere with the more legitimate side. He himself forcibly points out "how artificial is the line of cleavage between 'general' and experimental psychology". And we look hopefully to him for leadership back to unity and health, *ἐπιχειρῶν ποιῆσαι ἓν ἐκ δυοῖν καὶ ἰάσασθαι τὴν φύσιν τὴν ἀνθρώπίνην*.

C. SPEARMAN.

The Application of Statistical Methods to the Problems of Psycho-Physics. By DR. F. URBAN. Philadelphia: Psychological Clinic Press, 1908. Pp. 221.

We have here an important attempt to subject the current psycho-physical methodics to fundamental revision. The need of some such drastic step is easily demonstrated. In the first place, the present state is one of general disorganisation; the results arrived at by any method admit of no comparison with those obtained by any other one; fairly concordant work has indeed been done by the method of errors and by that of just perceptible differences, but why they should be concordant is left a mystery. And secondly, psycho-physical measurement is at present based upon various philosophical notions usually proclaimed as indispensable presuppositions; whereas in reality they are superfluous, unwarrantable, and mischievous. All this discordance and lumber the author proposes to sweep away by restricting himself throughout to simple notions of probability "by no means other than those used, *e.g.*, in the theory of life insurance or in the formal theory of population". He calls to his aid the recent Russian developments of statistical mathematics, and gives to his deductions the solid empirical support of some very careful experiments on the classical subject of comparing weights.

He begins by applying his principles to our oldest psycho-physical method, that of just perceptible differences. The threshold is shown to be a simple function of the probabilities of the various types of judgments "greater," "equal," and "less". Hereby this threshold is brought into clear contradictionless relations to the method of errors. At the same time the increased lucidity of the procedure brings about many improvements in detail; the most important of these appear to be an increased accuracy of determination and the new power of computing the probable error. He does not however attempt to grapple with the fundamental weakness of this method, which is that the threshold depends not only upon the subject's accuracy of perception but also upon his standard of certainty, an equivocality rendering it almost valueless for the majority of modern applications.

He devotes himself instead to elaborating an original method, that of "psychometric functions". He claims that it "combines the advantages of the error method with those of the method of just perceptible differences, and yields the results of the latter method almost without work". Continuing to base himself upon the probabilities of the different types of judgment, he now deals with these probabilities in a much more comprehensive manner; he makes the important assumption that they are analytic functions of the comparison stimuli, whereby he is enabled to determine their complete distribution and to represent it graphically. The chief characteristics of the ensuing probability curve are found to exhibit remarkable correlations with one another; several of them appear to afford equally good measures of sensitivity, the order of the seven persons tested being almost the same by one as by the other. Owing to the author's economy of presuppositions, these correlations were in no wise implied *a priori;* but having now been established empirically, they urgently need explanation; this, unfortunately, the author does not at present see his way to formulate.

Dr. Urban concludes with a remarkably interesting chapter on some of the deeper problems of the topic, discussing, especially from the point of view of mathematical evidence, the chief types of theories as to the relation between mind and body. He opposes the attempt of the Moscow school of idealism to turn the applicability of the calculus of probabilities into an argument for free-will. He shows forcibly that all metaphysical theories involving the notion of substance lead to very great difficulties in psychology, and he counsels us for the purposes of empirical science "to formulate the problem in such a way that it loses its ontological character, retaining only the general problem of finding relations between phenomena". He emphasises the fact that analytic functions could be applied so successively to his experiments; the power of making full use of exact quantitative methods in psychology does not depend—as so often supposed—on whether mental processes are 'measurable,' but only on whether psychological observations are amenable to treatment by analytic functions. And this he finds actually to be the case with psychological just as much as with physical observations.

C. Spearman.

God with us: a Study in Religious Idealism. By W. R. Boyce Gibson, M.A. (Oxon.), Lecturer in Philosophy at the University of London. London: Adam and Charles Black, 1909. Pp. xix, 229.

Mr. Boyce Gibson has followed up his able exposition of Eucken's thought by a volume which seeks to develop further some great ideas of the master. It is, on the whole, a study of the concrete problem of religious life rather than of the nature and limitations of religious knowledge. "The purpose of this book," he writes, "is restricted to the formulation and defence of a philosophy of the religious life from the point of view of the personal experient, the religious life being throughout conceived, not as any mere refinement of the 'natural,' but as a life whose distinctive inspiration and supreme motive is the conviction that God is with us" (p. viii). This position is described by the excessively ugly, if not obscure, term "anthropotheistic". Of this Anthropotheism the volume is, in one sense, a manifesto. It has been "adopted as mediating between the anthropocentric and the theocentric extremes. Anthropism, in so far as it is not also anthropotheistic, leaves man to save himself. Theism, again, in so far as it also is not anthropotheistic, leaves man's salvation to God alone, and is Calvinistic in tendency. But Anthropotheism commits the work of Redemption to a Power which is other than

man, only because it is ultimately one with him, and works for righteousness in and through the religious freedom of his spiritual life" (p. 227). The key to the position is Love; and in the light of that creative and reconciling principle are discussed such problems as the needs of adolescence, moral conduct, Monism, and Evil. In one place Mr. Gibson characterises his own work as a philosophy of *fruition*; and a good deal depends for our appreciation of his book on a clear understanding of this vital term. Here is an explanatory passage. "Fruition, as I conceive it, is no mere feeling of enjoyment. . . . It is rather that permanent, steadying, redeeming relation which links our mortality to the Life Immortal, and authorises the conviction that God is with us, and that the resources of our personality are not to be measured by any standard which presupposes our finitude or isolation, or any restrictions of bodily endowment or tenure of life" (p. xvi). Elsewhere the principle of Fruition is said to mean that "the whole religious life, from the first sense of sin to the perfection of holiness, is a participation in the life of God" (p. 83). Thus it becomes clear that Fruition is but another name for the feeling of Divine Immanence; and from this point of view Mr. Gibson's book takes its place as a worthy addition to the literature of a great subject.

Mr. Gibson adopts the plan, in much of his book, of elucidating his own thought by the detailed exposition and criticism of other men. Thus he comments in turn upon Eucken, Hall, Sabatier, Shand, James, and the two Cairds. Prof. Stanley Hall's Philosophy of Adolescence is regarded as furnishing Eucken's Activism with the needed support from empirical psychology; and in this there may be something worth discussion, though I should not myself go for strictly philosophic illumination to a writer who suggests that conscience "may be a wart raised by the sting of sin". But, anyhow, we may welcome the interesting and novel applications given by the new theory to the old saw that "it is love that makes the wheels go round". Mr. Gibson takes advantage of the opportunity for a full-dress debate upon the relations of morality and religion. Is it not the case, he asks in conclusion, that both have their roots in the *Gemütsleben*, or life of the Heart?

An interesting chapter deals with Pragmatism and Religious Idealism. Pragmatism, we are told, is doing Idealism the great service of compelling it to study over again the psychological bases of personality. Yet Idealism, even when religious and personalistic, "remains inveterately monistic," while Pragmatism clings stubbornly with pluralism. Here there is a broad ditch of separation. "For Religious Idealism the fundamental spiritual fact is not the mere plurality of selves, but the plurality of selves within a Spiritual Life" p. 197). Hope is found in James's assertion of "possibilities that are not necessities," if only these be not pressed so far as to imply detachment from the sources of reality and thus sheer discontinuity in things. Life and history, in any case, are more than the running-down of clockwork wound up "ere the worlds began to be". To recognise such possibilities is to imply the reality of freedom. No ultimate problems of this sort, indeed, are soluble unless we formulate them in a way that has respect to our personal experience, and relates itself to the needs and the ideals of the ethico-religious consciousness. God and man are interpretable only through each other. And evil will eventually perish by being "depressed to the status of mere latency".

Enough has been said to indicate the main drift of Mr. Gibson's work, as well as the speculative sympathies by which it is inspired. In some degree his writing shares the opaque and elusive quality which some readers have felt also in Eucken; yet, as with Browning, the second reading of a hard page usually brings light. "Mystic Idealism" cannot expect to

be grasped all at once. But so long as it is set forth with the grave and measured sincerity of this volume, and with so close and living a bearing on modern life, it will, I believe, lack neither readers nor disciples.

H. R. MACKINTOSH.

Laboratory Manual of Psychology. Pp. xii., 127. *Laboratory Equipment for Psychological Experiments.* Pp. xi, 257. By C. H. JUDD. London : T. Fisher Unwin, 1908.

These two books, together with the author's *Psychology*, which has already been reviewed in this journal (N.S., vol. xvii., pp. 420-422), are intended as "a series of text-books designed to introduce the student to the methods and principles of scientific psychology". All three books are now issued by the same publisher. The two volumes here under review recall the much larger work of Titchener, in so far as the one volume is intended for the student, the other for "those who wish to give demonstrations or to teach laboratory courses". One is tempted at the very outset to ask oneself how long this example of 'text' and 'crib' set by Titchener will be followed by writers succeeding him, and to wonder why, in the early days of other sciences, the books which were designed for use in the laboratory were not written on similarly dual lines. Without staying to discuss these questions, we may note that the scope of Judd's work is much narrower than that of Titchener's, and that his method of treatment is on the whole considerably more elementary. It has indeed been expressly written in order to facilitate the introduction of individual laboratory work "into a larger circle of institutions". From the preface it appears that psychology is still taught in most American colleges and normal schools without bringing the student into direct contact with experimental work.

It must be confessed that in one or two respects the *Manual* is likely to prove unsuitable for English students. Nearly all the references are to work done in America—too often to work not of first-rate character. Only Fechner, Wundt and Henri are quoted as writers in German; and there is practically no reference to English experimental work. We think too that the student will object to the vast number of unanswered questions that are put to him. Indeed, he may with good reason object to the form of the following: "Is there anything besides discrimination of tones involved in the recognition of intervals?" "How far is conscious volition in control of a co-ordinated movement?"

On the other hand, the text is written with admirable clearness, and may be recommended to the class of student ignorant of all scientific work, for which it is written. Now and again the instructions are deficient or wrong, as in the method of exploring the skin in order to demonstrate pressure spots, or as in the description of Ebbinghaus's method of testing memory. But, on the whole, the author is undoubtedly to be congratulated on the success with which he has performed the task he had set himself.

The volume which deals with laboratory equipment cannot be said to reflect great credit on the publishers. Most of the illustrations are extremely poor, due doubtless to the fact that they are copied secondhand from the catalogues of instrument makers. Some indeed, *e.g.*, Figs. 20, 23, 51 and 71, must, owing to excessive reduction or erroneous shading, be almost useless. Further, the reader is deprived of the convenience of headings at the start of each chapter and at the top of each page.

We could wish the author had found room for a chapter on psycho-

physical and statistical methods and for mention of space- and time-errors, which are valuable, at all events from the standpoint of method. In another edition it would be well, too, to remove such syllables as *sal*, *rev*, *dor*, *hak*, *kod*, from a list of nonsense syllables recommended for use in experiments on learning.

Apart, however, from these defects, the book is of considerable interest. It describes various pieces of apparatus not to be found in previous works, and will certainly prove a useful companion to the other volumes in the sense we have already indicated.

C. S. M.

Is Immortality Desirable? G. Lowes Dickinson. Boston and New York: Houghton, Mifflin & Co., 1909. Pp. 63.

In this discourse, the Ingersoll Lecture for 1908, Mr. Dickinson raises what he affirms to be a very practical question, the question whether a continuance of the individual life after death is desirable. We need not, he says, be deterred from discussion by the scientific denial of immortality. For science has no proof, and "to infer wisely in such matters, one must be a poet as well as a man of science"; "hypotheses should be framed under a compelling sense of our own limitations and the vastness of the universe".

Is immortality, in fact, desired?! The majority of mankind appear to be indifferent, not to think about death and what follows death. Some, and they are more numerous than is often believed, are pessimists in attitude, and desire extinction. But there are others who find immortality desirable. What, then, do they desire, and is it really to be desired?

It would certainly not be a good thing to prolong our present life indefinitely, although old people, in particular, often cling in this way to the world of the living. Nietzsche's doctrine of recurrent lives, without persistence of memory, is acceptable only in so far as lives are valuable; and there is no reason for adopting Nietzsche's cosmology. The simple and uncompromising Christian notion of Hell, if we strip it of any support in the idea of retribution,—and it is not for the sake of retribution that we desire immortality,—is so dreadful that we should prefer to it the extinction even of the best. What is really desired and desirable, what we really mean by Heaven, is "the ultimate term of a process in which we are engaged, of the end of which we can only say that it is good". "Immortality is desirable, if immortality means a fortunate issue of the quest of our souls."

But what is the soul? Soul may be simply substance, so that its immortality does not imply continuity of consciousness. Even so, immortality is desirable; it is a "consoling idea that our present capacities are determined by our previous actions, and that our present actions again will determine our future character". Much more desirable, however, would be an immortality with continuance of consciousness. We can hardly hope to particularise this continuance, to say what features of it would be desirable: the meeting of friends, perhaps, or inclusion in a wider self without loss of one's own self; it is impossible to say.

There is, then, a kind of immortality which, if it were a fact, would be a very desirable one. Whether it is a fact, we in the West have only just now, in the Society for Psychical Research, begun to inquire. The lecturer ends with an exhortation to take this branch of inquiry seriously, as befits a matter of immense practical importance.

P. E. Winter.

The Psychology and Pedagogy of Reading, with a Review of the History of Reading and Writing and of Methods, Texts and Hygiene in Reading. By EDMUND BURKE HUEY. New York: The Macmillan Company, 1908. Pp. xvi, 469.

Prof. Huey here essays the impossible,—a monographic treatment of reading in popular form. He has, nevertheless, made a very interesting little book, and one that brings together a quantity of useful information. From the scientific point of view, however, it is regrettable that he did not put his special knowledge at the service of a psychology of reading, and issue Parts ii., iii. and iv. of the present work in separate form.

Part i., The Psychology of Reading, discusses in competent fashion such topics as the work of the eye in reading, the extent of reading matter perceived during a reading pause, the nature of the perceptual process in reading, internal speech, the rate of reading, even the interpretation of what is read, and the nature of 'meaning'. A revision and expansion of this part, in the light of recent experimental studies, would be extremely valuable. Part ii., The History of Reading, is brief and somewhat perfunctory, though the writer shows no little skill in the selection of his illustrations. Part iii., The Pedagogy of Reading, is excellently written, and seems to have been regarded by the author as the central portion of his work. The six chapters discuss present-day methods and texts in elementary reading, the views of representative educators concerning early reading, learning to read at home, learning to read at school, reading as a discipline and as training in the effective use of books, and "what to read," with special reference to the adolescent period. The part ends with a baker's dozen of practical pedagogical conclusions (pp. 379 ff.). Part iv., The Hygiene of Reading, has two chapters devoted to reading fatigue and to hygienic requirements in the printing of books and papers. Prof. Huey concludes by calling attention to two pressing needs: the need of detailed studies of specific problems, to furnish much more than we possess of fact and of suggestion; and the need of the determination of reading *optima*, along the more important lines mentioned in the book, by committees of specialists, if necessary with governmental aid and supervision.

The volume closes with a selected bibliography and a good analytical index.

FRANCIS JONES.

Immortality. By E. E. HOLMES, Hon. Canon of Christ Church, Oxford, etc. (The Oxford Library of Practical Theology.) London: Longmans, Green, and Co., 1908. Pp. xv, 320.

This pretty volume discusses nearly every question externally connected with its theme, but the theme itself is virtually left untouched. The work is written, of course, from the distinctly Christian point of view, and it is all the more astonishing that it nowhere contains a serious or worthy treatment of the only argument for immortality that counts for anything in the Bible. In the Bible, faith in immortality is simply an immediate inference from faith in God. The Psalmist, and Jesus in His turn, felt that no one who knows what God is, or what He has done for men, could believe that He will relinquish them to the dust. "He is not the God of the dead, but of the living." Compared with this, thoughts upon the "Pain of Paradise," or "The Shortness of Life," on which Canon Holmes has written at surprising length, are trivial and irrelevant. We are actually told that if Apparitions could be verified by photographs, it would "at once satisfy our questionings and longings in favour of a future

existence". Only, it is added, with grave concern, "the fact that Apparitions practically always appear clothed, and are not infrequently seen in carriages, has never yet been satisfactorily explained"! Undue importance, also, is attached to the religious conjectures of the late Mr. Cecil Rhodes. Each aspect of the theme, as Mr. Holmes has chosen to interpret it, is illustrated copiously by quotations, and it strikes one as rather odd that so many Christian thinkers should have dallied with the idea of pre-existence.

H. R. Mackintosh.

Reginald Pecock's *Book of Faith: A Fifteenth Century Theological Tractate*. Glasgow: J. Maclehose & Sons, 1909. Pp. 315.

Prof. J. L. Morrison of Kingston has edited this book, now printed for the first time, from the manuscript in Trinity College, Cambridge, and has written an excellent introductory essay. Pecock is known mainly from his *Repressor*, in which he made use of rationalism to defend the Church against the Lollards, and from the fact that he, the Bishop of Winchester, was condemned for heresy. A choice of ignominies was offered. He could abjure or be burned. Not having courage, he preferred "to incur the taunts of the people than to forsake the law of faith, and to depart after death into hell-fire and the place of torment". In spite of his inglorious weakness, he deserves to be remembered, since, according to Prof. Morrison, he was the best English representative of the Renaissance thought of the fifteenth century, and the one man of the country to be classed with the Italians. Pecock, while he honoured the syllogism with almost more than Mediæval reverence, had the audacity of one of our own modernists. He claimed for reason the right to deal with the mysteries of faith, and, mean though his end was, he pursued truth in the light of reason.

J. H.

L'Année Psychologique. Vol. xiv. Paris: Masson et Cie, 1908. Pp. vi, 500. Price 15 fr.

Original papers: *Binet et Simon*, Le développement de l'intelligence chez les enfants: a most interesting and valuable paper, giving a series of well-tried tests for children of all ages from three to thirteen years (summary of tests, pp. 58-59) (pp. 1-94). *Houllevigne*, Les idées des physiciens sur la matière. *Sourian*, L'enseignement de l'esthétique. *Borel*, Le calcul des probabilités et la méthode des majorités (pp. 125-151). *Binet*, L'évolution de l'enseignement philosophique: the careful and impartial analysis of answers to a circular, questioning teachers of philosophy in France about books, methods, aims, results of their teaching, etc. This paper is exceedingly interesting, and deserves the attention of all teachers of philosophy (pp. 152-231). *Imbert*, Le surménage professionel: a short discussion of four reports of work on this subject read at the International Congress for Hygiene in Berlin, September, 1907. *Rauh*, Morale et Biologie. *Goblot*, La démonstration mathématique: statement and criticism of Poincaré's views (pp. 264-283). *Binet et Simon*, Language et Pensée: a discussion of observations on an imbecile, leading to the conclusion that there is thought without imagery or words, and that thought consists of an intellectual feeling (pp. 284-339). *Chabot*, Hygiène et pédagogie. *Cantecor*, Le pragmatisme: ni problème défini, ni discussions méthodiques, ni solutions précises; mais des affirmations vagues, des equivoques, des improvisations hâtives—voilà ce que nous trouvons dans le pragmatisme (pp. 355-379).

The appendix in recent literature includes a summary of recent work on 'réflexion' by *Etienne Maigre*. Through the work of Ribot and Binet on intelligence and thought, France is already much in sympathy with the later work of Külpe's school; an 'Essai de chiromancie expérimentale' by *Binet*, who, with the objectivity which is so characteristic of him, attacks the subject experimentally and finds in favour of signs of intelligence in the hand; as well as a 'causerie pédagogique' with the editor, showing the position of practical efforts in this direction in France (pp. 405-431). The volume closes with sixty-seven pages of notices of papers, written largely by the several authors themselves.

HENRY J. WATT.

Intelligenz und Wille. DR. E. MEUMANN. Leipzig: Quelle & Meyer, 1908. Pp. viii, 293. Geb. 3·80 marks.

The problems of intelligence and will demand at the present time continued study and revision. Many new prospects towards the investigation of intelligence have been opened out in some of the recent work on thought. On all three subjects we find in Meumann's book general discussions of a fresh and most suggestive kind.

The first half of the work, which deals with Intelligence, shows three main divisions. The first of these deals with the formal presuppositions and antecedent conditions of intelligence, such as Attention, Practice, Disposition, Fatigue and the like. In the second, 'the material presuppositions of Intelligence,' we have a chapter on Observation, in which is embodied an interesting appreciation of Ruskin as the extreme type of a mind dominated by the habit of observation, as well as chapters on Memory and Phantasy, in relation to Intelligence. On most of these subjects Meumann is, of course, particularly well qualified to write discursively. The third main division deals with Thought.

The second half of the book is devoted to the discussion of Will and its relation to Intelligence, whereby the connexions between Will and Type of Character and Temperament are treated in an interesting way. In the end precedence is given, if at all, rather to Intelligence than to Will, although both are well balanced against each other, and hope is pointed towards a possible future suppression of the antagonism between these two ancient philosophical divinities. The instincts and sentiments might, we think, perhaps have received a little more detailed treatment as part of the material basis of voluntary action.

In general the effect of different mental activities of a lower order upon thought and intelligence and the use made of the former are well shown up. Suggestive indications are given of the extent to which the lower faculties can simulate or take up the work of intelligence. The book will doubtless be of considerable service to pedagogy. It is well written and very readable, and may be heartily recommended to all interested in a many-sided and not too abstract treatment of the relation of Will to Intelligence.

H. J. WATT.

Bericht über den III *Kongress für Experimentelle Psychologie.* Edited by PROF. DR. F. SCHUMANN. Leipzig: J. A. Barth, 1909. Pp. xxii, 263. 9 marks.

This report, like that of the second congress, contains a number of very valuable critical summaries of work done in important fields. The first is by Ludwig Edinger, Direktor of the Neurological Institute in Frank-

fort, on the 'Relations between Comparative Anatomy and Comparative Psychology' (pp. 1-21). The second is by Prof. Ed. Claparède of Geneva on the 'Methods of Psychological Observation and Experiment upon Animals,' in the text of which are embodied fullest references to the literature (pp. 22-58). The third, 'On the Understanding of Speech from the Point of View of Pathology,' is by Prof. A. Pick of Prague (pp. 59-90 with bibliography). Closely related to it is the fourth, 'On the Understanding of Speech from the Point of View of Normal Psychology,' by Dr. Karl Bühler, Privatdozent in Würzburg (pp. 94-128 and bibliography). Lastly we have a critical discussion of theories concerning 'the pathological behaviour of the attention,' by Dr. W. Specht, Privatdozent in Munich (pp. 131-190).

It would be difficult to overestimate the value of these papers, which give to such a congress-report an interest it could not otherwise have. It is obvious that the topics for these critical reports have been carefully chosen by the committee of the society. If the high standard of this work is kept up for a number of years, the society will become an important factor in the organisation of psychological interest and work. It would be impossible to criticise the papers in detail or justly in a short space. They are to be heartily recommended to all who are interested in the subjects they deal with, and each will be found most useful, if not indispensable. It is interesting to notice how much helpful co-operation and sympathy seems to exist in Germany between psychologists and psychiatrists.

The usual swarm of small papers follows at the end of the volume (pp. 195-263).

H. J. Watt.

Socrate. By G. Zuccante. Milan, Turin and Rome: Fratelli Bocca, 1909. Pp. viii, 412.

It is not too much to say that, after all that has been written about him, Socrates still remains the most mysterious figure in the history of Greek thought. Every one agrees that in some way he gave a direction to Philosophy which it has retained ever since, and yet no one seems to have succeeded in explaining what he taught or even what manner of man he was. I believe myself that this is entirely due to the fundamental error of regarding Xenophon and Aristotle rather than Aristophanes and Plato as the most trustworthy witnesses to fact where Socrates is concerned, and I can see no hope that the Titanic figure of the true Socrates will be restored to its rightful place in our Histories of Philosophy until we learn that all but the latest writings of Plato adhere, as he says himself in his *Letters*, to the historical truth about his master, to a degree which modern expositors do not suspect. Meanwhile Mr. Zuccante's book represents at least a step in the right direction. Though he builds in the first instance upon Xenophon, and has not found out that every statement of importance which Aristotle makes about Socrates comes direct from Plato, he has so far availed himself of the Platonic evidence, corroborated as it is by Xenophon's own admissions, as to do some measure of justice to the influence of mathematics on Socrates, and to that extent to recognise the verisimilitude of the caricature of the *Clouds*. What he fails to see is that the evidence of Plato and Aristophanes proves the existence of a curious mystic strain in the thought of the great rationalist, and drives us to admit, what his knowledge of mathematics and his acquaintance with Simmias and Cebes confirm, that Socrates stands historically in very close connexion with the Orphic-Pythagorean circles. It is, to my mind, precisely our persistence in ignoring the Pythagorean

element in Socraticism which makes the current accounts of the development from Socrates through Plato to Aristotle so incomprehensible. Mr. Zuccante shares in the general blindness on this point, but his work is an excellent exposition of the thought of Socrates so far as it can be learned, while Plato continues to be used merely to illustrate a conception of the philosopher based throughout on the view of him as a mere rationalistic moralist, though a moralist with a wonderfully developed dialectical method. I could wish, however, that in his account of the life of Socrates, he had attended to the important chronological data supplied by Plato, which of themselves are enough to dissipate most of the assumptions commonly made by those who rely on Xenophon for the mental history of the master. (Thus, much may be inferred from the fact, revealed by a chance allusion in Plato, that "the φροντιστὴς" was a current nickname of Socrates years before Aristophanes put the φροντιστήριον on the stage.) I cannot speak so favourably of the author's conception of the "sophists" and their connexion with the Socratic philosophy, in which he seems to be influenced by certain popular but demonstrably mistaken ideas about Athenian life. It is a pure fancy that the great "sophists" took to the teaching of rhetoric because, having by their scepticism deprived thought of all content, they were driven to deal only with the forms of its verbal expression. Their real object was the practical one of making a living, and the teaching of rhetoric provided a living because, in the Athenian democracy, rhetoric was, as Plato puts it, a life-preserving appliance. That is, it was an art by which the suspected oligarch might contrive to get off when brought before a democratic jury.

It is a similar mistake to suppose that "sophists" were popular at Athens, and that the reason for their popularity was the amusement which their rhetoric and discussions gave to an idle[1] and quick-witted populace. Any study of the works of Isocrates, Plato, Xenophon will show that the sophists were regarded by the democracy with the greatest ill-will, and that their pupils were drawn not from the "people," but from the anti-democratic minority of youth of wealth and high position. The man of the people, like Anytus, hated the sophist because he felt that sophistry was putting into the hands of the oligarchical few a weapon which the ordinary democrat was too poor to purchase. So it is really too late in the day to bring up the old fable of the corruption of public morality by the wicked sophist. One might reasonably doubt with Grote whether Cleon and Hyperbolus were really *morally* worse men than *e.g.* Pericles; their inferiority seems to be mainly in taste and intellect. But if it were true that they were also morally inferior, the blame could not lie with the sophists, since no one suggests that Cleon and the rest of

[1] Any careful study of Aristophanes and the orators will show that the Athenian citizens were, for the most part, farmers and small shopkeepers, not a class who can afford to spend the day idly listening to oratory. The persons whom Aristophanes satirises as passing their whole time on juries after all did so largely from necessity and not from choice. The dicast's pay must be regarded very largely in the light of a State provision of employment for citizens who had been driven from their farms by the war, and would have starved from enforced idleness but for the occupation afforded by the Heliæa. In fact it was at first hardly so much "pay" as "compensation for loss of time," since the amount was carefully kept down to the minimum on which life could be supported, as my colleague Prof. Burnet reminds me. As Prof. Bury has already observed, the raising of the dicast's μισθὸς by Cleon was an economical necessity brought about by the war.

the democratic leaders were the pupils of the sophists. An equally grave misconception which dominates a good deal of the present work is the notion that Socrates was led to undertake his public career as a moralist by dissatisfaction with the superficiality of sophistic theories of conduct. Any careful study of Plato will show this view to be a delusion. According to the *Phædo* the great philosophical change due to Socrates was the abandonment of speculation based upon loose analogies supplied by sensible experience for the application of mathematical methods to all the problems of philosophy, and the cause of it was dissatisfaction not with the moralists but with the cosmologists. The appearance of Socrates as a moralist is connected by Plato with the famous response of the Delphic oracle. Neither he nor any other ancient authority gives any ground for believing that Socrates stood in any relation to the "sophists" beyond that in which he stood to all persons who claimed to be in possession of ἐπιστήμη, and sophists are not even mentioned in the *Apology* among the classes of such persons upon whom the elenchus was exercised. In short, if we follow the only evidence we possess, Socrates stood in a very close relation to ancient cosmology, particularly to the school of Anaxagoras, and to Pythagorean mathematics and religion, but had no special connexion of any kind with the sophistic movement. Until we see that Socrates has really very little to do with this movement, but is first and foremost the connecting link between Anaxagoras and Philolaus on the one side and Plato on the other, I do not believe that we shall ever understand the real development of Greek thought.

A. E. Taylor.

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Th. Ziehen, *Die Erkennung des Schwachsinns im Kindesalter*, Berlin, S. Karger. 1909, pp. 32.

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Mathias Kalens, *Die Quadratur des Kreises, Ihre vollständige Auflösung in 8 Figuren.* Saarbrück, Selbstverlag des Verfassers, 1909, pp. 12, mit Beilage.

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VIII.—PHILOSOPHICAL PERIODICALS.

Philosophical Review. Vol. xviii., No. 4. **A. W. Moore.** 'Absolutism and Teleology.' [Can absolute perfectionism be reconciled with the conception of evolution as an essential character of reality? This issue is as critical in ethics as in logic. The absolutist declares that unless there is an all-inclusive fixed purpose, end or goal, there is no standard for moral progress, and that a demand for participation in the reconstruction of the ideal also overlooks the problem of the standard of this construction. The evolutionist replies that the all-inclusive purpose is either unknown or irrelevant to the here and now, and that he cannot reconcile the absolutist doctrine with moral responsibility as directly experienced. He himself then appeals to social process, only to be met by the rejoinder that the social character of experience is impossible without the absolute.] Reviews of Books. Notices of New Books. Summaries of Articles. Notes.

Psychological Review. Vol. xvi., No. 3. Darwin Number. **A. T. Hadley.** 'The Influence of Charles Darwin upon Historical and Political Thought.' [The idea of evolution had long been current in history and politics. Darwin showed two things in these fields: that natural selection develops, not only individuals of superior ability and intelligence, but also types of superior adaptation to their surroundings; and that this adaptation is what gives the type its right to exist. He thus made it possible for historians and political thinkers to set up objective standards and attain to objective results. It is this objectivity that differentiates Morley on *Compromise* from Mill on *Liberty*, and that makes the one author readable and the other unreadable to-day.] **J. R. Angell.** 'The Influence of Darwin on Psychology.' [Darwin came late into modern psychology, and found analysis already in the field. In general, however, Darwinism has helped to bring into prominence functional and genetic (including animal psychology. In particular, Darwin gave us a theory of the evolution of instinct, the doctrine of continuous mental evolution from the lowest animal to man, and principles of emotive expression. The psychology of instinct has passed through the stage of acquired characters to that of organic selection, and is now passing with Jennings and Loeb into the stage of experiment. Darwin's view of mental evolution holds its ground against Mivart and Wallace, on the one hand, and Loeb on the other. His list of emotive principles has not been materially improved upon, though it cannot be taken as final. Darwinian problems for the future are the study of animals in the laboratory but under natural conditions, and the determination of mental types on the general analogy of genera and species in zoology.] **J. E. Creighton.** 'Darwin and Logic.' [Indirectly Darwinism brought renewed confidence in the fruitfulness of their method to the humanistic sciences that were already employing evolutionary conceptions. Directly, the suggestion made in the *Descent* regarding the function of imitation has led to important results in logic.

But while logical thinking is a mode of living, and so advantageous to the organism and capable of biological treatment, this treatment is not philosophy. For logic, thinking is not rightly construed as adjustment to physical or social environment. Dissatisfaction with Hegel has led to the views of Baldwin and of the pragmatic evolutionists; but the former ends his logic with a dualism, and the latter interpret thought as purely practical and instrumental. In fact, Darwin's conceptions can be fruitful for logic only when transformed in the light of an idealistic philosophy. For reason and purpose are not explicable in terms of phenomenal relations, but are presupposed in all science and experience.] **C. A. Ellwood.** 'The Influence of Darwin on Sociology.' [Darwin's great influence upon sociology may be ascribed to the facts that natural selection was a principle that had already been recognised and applied (Malthus) in social theory, and that the biology which he established is a necessary foundation of sociology. The effects of the influence are seen in the sociological use of the concepts of natural and social selection, in Galton's eugenics, and indirectly in the rise of functional psychology.] **J. H. Tufts.** 'Darwin and Evolutionary Ethics.' [Historically, the questions of origin and validity have been persistently and almost inseparably connected; this appears from a review of evolutionary theories of morals down to Spencer. Darwin approached the ethical problem exclusively from the side of natural history, and makes the acquisition of a moral sense or conscience inevitable at a certain stage of mental development. His view is weak in that it conceives the moral consciousness preponderantly in instinctive and emotional terms, and lays too little emphasis upon the social character of the individual; strong, in that it gives the whole theory of moral development a widely conceived and definitely evidenced concrete setting, and furnishes a broad basis for the social nature of man. He regards his own discussion of the part played by natural selection as imperfect and fragmentary. His emphasis on sympathy is in contrast with current views of Darwinism in ethics.] **J. M. Baldwin.** 'The Influence of Darwin on Theory of Knowledge and Philosophy.' [In theory of knowledge, the doctrine of evolution has given us the ideas of instrumentalism and of community. Instrumental or experimental logic holds that all truth is confirmed hypothesis, and that all reason is truth woven into mental structure. (Pragmatism, maintaining that truth, apart from its utility, is not true, defeats itself.) The theory of the common validities of knowledge and of the corresponding common interests of society is, again, a possession that we owe to Darwinism. In general philosophy, we have, first, the introduction of the methods of scientific naturalism and positivism; probabilities and natural law, *e.g.*, replace chance and special creation. We have, secondly, the broadening of the idea of cause, beyond that of energy; we have been taught that nature achieves novelties, that there is, qualitatively, more in the effect than there is in the cause. In short, Darwin gave the death-blow to uncritical vitalism in biology, to occultism in psychology, to mysticism and dogmatism in philosophy.]

American Journal of Psychology. Vol. xx., No. 2. **T. Nakashima:** 'Contributions to the Study of the Affective Processes.' [(1) Experiments with colours and tones, by the method of paired comparisons, warrant the conclusion that affective judgments may be and usually are as direct and immediate as the sensory judgments of psychophysics. (2) The method of single stimuli does little more than bring out the theories and idiosyncrasies of the observers. It shows, however, incidentally, that affection never precedes its sensation. (3) The method of the cognitive and discriminative reaction may be applied to pleasantness-

unpleasantness; the times are regular, but are longer than the corresponding sensation-times. (4) There is no unambiguous evidence for mixed feelings, affective localisation, or difference of quality within pleasantness-unpleasantness.] **F. Kuhlmann.** 'On the Analysis of Auditory Memory Consciousness.' [An attempt to determine the conscious processes that enter into the memorisation and recall of a given sensory material,—verbal discourse and groups of familiar sounds. Words were recalled directly by auditory imagery, associatively by visual imagery, or inferentially, through the verbal or visual context. With lapse of time the visual imagery increased in amount and continuity, while the part played by auditory recall markedly decreased. With the groups of sounds, auditory imagery was very fragmentary; its course was irregular; and as a rule it was beyond the reach of direct voluntary control. The motor processes used in imitating the sounds were the most important factor in recall; they were inseparably connected with the effort to recall a sound vividly and minutely. Visual imagery was fairly prominent.] **C. H. Waddle.** 'Miracles of Healing.' [Reviews the theories of disease held by primitive peoples; discusses primitive applications of the healing art, with especial reference to magic and miracle; traces the course of miraculous healing throughout the Hebrew and Christian civilisations, indicating current survivals of ancient superstition; and offers psychological interpretations. Cures deemed miraculous "are brought about in accordance with the law that the mind tends to translate into physical reaction any suggestion or idea which can be actively aroused and kept at the focus of attention. That this may be done, the idea must seem reasonable and possible, and inhibiting and opposing ideas must be banished." Advocates the co-operation of churchmen, physicians and psychologists in the application of the laws of mental healing; these have not only a hygienic, but also a moral, spiritual and pedagogical value. Bibliography.] **M. W. Calkins.** 'The Abandonment of Sensationalism in Psychology.' [Sensationalism has been transcended by the Wundtian extension of the doctrine of feeling and by the recognition of relational elements. (1) Wundt's tension, however, is attention; his relaxation is sensational; his excitement and quiescence are relational. (2) The relational elements are now explicitly accepted by a number of psychologists of different periods, prepossessions and training. Their acceptance does not involve that of imageless thought.] **I. M. Bentley, E. B. Titchener,** and **G. M. Whipple.** 'Some New Apparatus.' [Describes an observation table for work with protozoa and other small animal forms; a combined stereoscope, telestereoscope and pseudoscope for demonstrational purposes; and an arrangement of forks for testing the pitch-discrimination of school children.] **M. McMein** and **M. F. Washburn.** 'Minor Studies from the Psychological Laboratory of Vassar College, xi. The Effect of Mental Type on the Interference of Motor Habits.' [A study of card-sorting habits, begun with the view of finding out whether two relatively simple or two relatively complex habits interfered the more with each other, led to difference of result in accordance with mental type, as visual or motor. Visual images are acquired and lost more rapidly than motor habits. Visual change in the task to be learned affected the motor more than the visual type; visual distraction affected the visual more than the motor.] Psychological Literature. Notes.

The Sociological Review. Vol. ii., No. 2, April, 1909. 'The Reports of the Poor Law Commission': **Bernard Bosanquet,** 'The Majority Report'; **Sidney Webb,** 'The End of the Poor Law'. [Dr. Bosanquet considers that the conflict of ideas is as to whether the dis-

tinction between what we may call social therapeutics and normal provision for health and education is justified. Regarding minor objections he holds that to deny private charity a place in the scheme of social assistance would be in practice to close the principal laboratory of social invention; and that the more powerful and secure the democracy, the better it can afford to give comparative independence to its authorities. In regard to main divergence, Dr. Bosanquet points out the enormous difference between the treatment of sickness in ordinary and in necessitous cases. Similarly with education. An able and effective paper. Mr. Sidney Webb gives some space to reconsidering the 1834 Report in regard to modern developments. The Majority Report would practically condone the present overlapping of functions, waste and confusion. The Minority alone have a plan to meet this, and they alone really face the question of unemployment.] **G. Chatterton Hill.** 'Race Progress and Race Degeneracy.' [Consideration of the influences which may effect the germ-plasm.] **M. E. Robinson.** 'Music as a Social Discipline.' [A plea for aiming at imparting an intelligent appreciation of music, rather than a superficial technical ability. The function of music in society.] **A. E. Zimmern.** 'Was Greek Civilisation Based on Slave Labour? II.' Discussions: 'The Moral Education Congress.' **E. Lyttelton.** 'The Present Position of Positivism.' **James Oliphant.** Annual Meeting of the Sociological Society, etc.—Vol. ii., No. 3, July, 1909. **Right Hon. Sir John Gorst.** 'The Reports on the Poor Law.' [A careful and interesting comparison. The questions to answer in considering the two Reports are: (1) Shall the County Councils, in dealing with the non-able-bodied poor, be allowed to act through their already established committees, or shall a newly constituted committee be imposed upon them to deal with these matters on the lines of the old Poor Law? (2) In dealing with the able-bodied and unemployed poor, shall the authority charged with the task be Local or National?] **C. W. Saleeby.** 'The Obstacles to Eugenics.' [These are the antagonism between individuation and genesis; the ignorance created by modern "education"; misrepresentation by friends and enemies; prudery; social, political or other bias; definitely anti-eugenic practices, *e.g.*, conscription.] **W. Leslie Mackenzie.** 'Sociological Aspects of Health.' [Curative medicine and preventive medicine have come to a fresh synthesis in the medical inspection of the school child. Reflexions on Jones's *Malaria—A Neglected Factor in the History of Greece and Rome*, etc.] **G. Chatterton Hill.** 'Race Progress and Race Degeneracy—Conclusion.' [Consideration of the decreasing French birth-rate. How far due to the union of two originally distinct and antagonistic racial elements. The least fertile unions those in which racial asymmetry is combined with religious disharmony.]

JOURNAL OF PHILOSOPHY, PSYCHOLOGY AND SCIENTIFIC METHODS. vi., 9. **E. B. McGilvary.** 'Experience and its Inner Duplicity.' ["The real question is whether all the peculiar features of 'consciousness' are not differentiating peculiarities of a unique way of togetherness of things."] **W. P. Montague.** 'The True, the Good and the Beautiful from a Pragmatic Standpoint.' ["The best antidote for the intellectualistic ethic of Mr. Bradley was the voluntaristic logic of Mr. Schiller. But why neglect the middle ground of common-sense?"] **E. L. Thorndike.** 'A Note on the Specialisation of Mental Functions with Varying Content.' **K. Schmidt.** 'Concerning a Philosophical Platform.' [Reply to J. E. Creighton in v., 6.]—vi., 10. **R. S. Woodworth.** 'Hermann Ebbinghaus.' [Obituary.] **W. T. Marvin.** 'The Field of Propositions that have full Factual Warrant.' ["Intuitions do not give us premisses

from which causal propositions can be inferred or deduced."] **I. W. Riley.** 'Transcendentalism and Pragmatism.' [Compares James with Emerson.]—vi., 11. **K. Schmidt.** 'Critique of Cognition and its Principles.' [Four in number, *viz.*, logical purity, completeness, simplicity and truth.] **H. R. Marshall.** 'Clearness, Intensity and Attention.' [Clearness is only the term to describe intensity in fields of a broader nature than those in which the typical intensity, *viz.*, sensational intensity, appears.] **A. W. Moore.** 'Antipragmatisme.' [Points out that M. Schinz's book with this title (1) openly argues against Pragmatism on the pragmatic ground of 'consequences' and (2) attacks Dewey by garbled quotations.] Meeting of the North Central Association of Teachers of Psychology in Normal Schools and Colleges.

Revue Néo-Scolastique. Mai, 1909. **M. S. Gillet.** 'Moral Temperament according to Aristotle.' [Moral temperament supervenes upon physical. A healthy moral temperament comes of the cultivation of the moral virtues, by which we play the philosopher with passion.] **C. Piat.** 'Sanctions.' [That nature is not indifferent to morality.] **M. de Wulf.** 'History of Æsthetics.' [Whether beauty is an attribute of things, or of our representative states, or of both. Greek and German theories.] **P. de Groot.** 'A Chapter of the Life of St. Thomas.' [His defence of the Friars at the University of Paris.] **L. Noël.** 'The Neo-Thomist Movement.'

Revue de Philosophie. 1er Juin, 1909. **E. Baron.** 'The Theory of Knowledge in Pragmatism.' [Origin and present state of Pragmatism in England. Pragmatism still in course of formation. "Pragmatists may severally develop different metaphysics, indeed they have already begun to do so."] **E. Baudin.** 'The Psychological Method of W. James.' [A highly eulogistic exposition. "The Science of Mind must necessarily be an original Science. The Ego will ever hold in check the organising principles of the Non-Ego, and its life cannot but refuse all formulas of Inertia. The principle of Inertia, the foundation of Physical Science, is the one principle of which we may be certain that it will never enter into Psychology."] **P. Charles.** 'The Philosophy of Rudolph Eucken.' **G. Michelet.** 'Critical Review of Moral Science.' [Is Moral Science normative? Review of five recent French works on the subject.]

Revue de Métaphysique et de Morale. 17e Année, No. 2, Mars, 1909. **J. Tannery.** 'Pour la science livresque.' [A defence of book-learning.] **M. Calderoni.** 'Formes et critères de responsabilité.' [Distinction between moral and judicial, penal and civil responsibility, and long discussion of the two latter.] **L. Weber.** 'La morale d'Épictète et les besoins présents de l'enseignement moral' (*Suite et Fin*). **A. Reymond.** 'Note sur le theorème d'existence des nombres entiers et sur la définition logistique du zero.' Étude Critique: 'La religion d'aujourd'hui'. **G. Sorel.** Questions Pratiques: 'Expérience de double traduction en langue internationale'.

Zeitschrift f. Psychologie. Bd. li., Heft 1 und 2. The number has, as frontispiece, a portrait of the founder and late editor of the *Zeitschrift*, Prof. Ebbinghaus, whose untimely death is deeply deplored by all psychologists, and will be felt as a severe personal loss by those who had the privilege of his friendship. A brief appreciation of his services to science is signed by his collaborators on the editorial staff and by the head of the publishing house from which the *Zeitschrift* is issued; a sketch of his life and work is supplied by a former pupil, E. Jaensch. **G. Heymans** und

E. Wiersma. 'Beiträge zur speziellen Psychologie auf Grund einer Massenuntersuchung, vi.' [Examines, in the light of the authors' well-known questionary material, the correlations between activity, emotionality and secondary function (influence upon present conduct of past experiences) which were brought out by Heymans' biographical study, *Über einige psychische Korrelationen*. In general the two sets of results agree; their divergences are methodically important. It is found that the apparent correlation between predominance of primary function (relative independence of past experiences), on the one hand, and emotionality and non-activity, on the other, is apparent only: what is favoured by emotionality and non-activity is not primary function, but a group of attributes to which primary function is also favourable. The combination of the two modes of function with emotionality, activity and their opposites, gives rise to eight types of character: the amorphous, the apathetic, the nervous, the sentimental, the sanguine, the phlegmatic, the choleric and the impassioned. These are studied in detail.] **V. Benussi.** 'Uber "Aufmerksamkeitsrichtung" beim Raum- und Zeitvergleich.' [A continuation of the author's investigation of equivocation of form, and of the internal processes which condition it. (1) In the tachistoscopic apprehension of three horizontally arranged points, the comparison of the spatial intervals depends upon two factors: the subjective grouping of the points, and the relative insistence or strikingness of the distance between two points, *D*, and of the complex *C* formed by two limiting points and the intervening space. These two factors are interdependent. In the last resort, however, the ratio of *D* to *C* is decisive: that interval is subjectively lengthened in which *D* is more insistent than *C*, and that is shortened, in which *C* is more striking than *D*. (2) In the apprehension of two contiguous temporal intervals, formed by three noises of equal intensity and of the same pitch, the judgment of comparison is determined by the rhythmical grouping or accentual form of the sounds; all moments that enhance the distance or distinctness of the stimuli tend to bring about a subjective lengthening of the interval, and conversely. If the sounds give a predominating impression of sequence or succession, the judgments tend (not by a process of comparison, but by the mere obscuration of the impression of interval) towards equality. Special tendencies of judgment are set up by variety of colour in the points and of pitch in the noises.] **K. Bühler.** 'Zur Kritik der Denkexperimente.' [Reply to Dürr and von Aster. The main point of criticism, that the introspective reports were rather indicative, informatory than psychologically descriptive, is briefly met by the counterstatements that much information had to be included, to fill out gaps in the context, and that Dürr's *sprachliche Darstellung* is not the same thing as von Aster's *Kundgabe*.] Literaturbericht. Kongressanzeigen. [Haydn-Zentenarfeier; VI^me^ Congrès international de Psychologie; xvi. Internationaler Medizinischer Kongress.]

Archiv f. d. gesamte Psychologie. Bd. xiv., Heft 1 und 2. **G. Stoerring.** 'Experimentelle und psychopathologische Untersuchungen über das Bewusstsein der Gültigkeit.' [Continuation of the author's experiments on the simple processes of inference. The observers distinguish a state of assurance from a consciousness of validity. The former is a state of consciousness in which there is no awareness of correctness as such, but which would discharge at once by the answer 'yes' if the question of correctness were put. It is characterised by a feeling of necessity, a feeling of identity, a feeling of satisfaction, etc., variously disposed and variously intensive. The author rightly remarks that processes such as these may be identified and discriminated by the observers, despite the impossibility of their psychological description. The full consciousness

of validity appears (as is shown by psychopathological analogy) when, given an absorbed attention, certain mental acts force or thrust themselves upon us. Judgment may be defined, psychologically, as any experience that is connected with a state of assurance or with this consciousness of validity.] **K. Beckmann.** 'Der Wille bei Descartes: eine psychologische Untersuchung.' [The ultimate mental functions, for Descartes, are cognition and volition, *perceptio* and *volitio*, which may further be identified with *passio* and *actio*. The paper is devoted to a detailed consideration of the Cartesian doctrine of will, under the headings: judgment and volition, range of will and cognition, nature of error, freedom of the will and indifference, will and causation, will and passion, particular voluntary actions (attention, recollection, imagination), will and bodily movement.] **M. Schlick.** 'Das Grundproblem der Ästhetik in entwicklungsgeschichtlicher Beleuchtung.' [The ultimate problem of æsthetics is the question: Why are things beautiful? It has been variously answered, and the possibility of an answer has been denied. In modern times, it has been customary to distinguish a direct and an indirect (associative) æsthetical factor: the former, of course, is an inexplicable datum; but the latter may be explained, if we take the biological, evolutionary view. Let us assume that all beauty is associative, and let us distinguish the beautiful from the useful, defining the useful as that which maintains the species. How, then, could the æsthetic attitude be developed? It would emerge, evidently, whenever an individual was in presence of a useful object, but was himself so situated that the desires which the object could satisfy were already satisfied; the object would not be indifferent, but its perception would (on the ground of former experiences of the satisfaction of desire) reproduce a feeling of pleasure. This view gives us the genesis of æsthetics, and in so far solves the æsthetic problem; enables us to explain the chronological order of æsthetic production; accounts for the importance of idea-feelings as opposed to stimulus-feelings; shows the relative truth of the play-theory, the Plato-Herbart theory, etc. At the same time, it seems that a direct æsthetic factor must also be admitted, a factor that is psychologically ultimate, but that may be explained biologically as a form (the play-form) of adaptation.] **L. Truschel.** 'Das Problem des sogenannten sechsten Sinns der Blinden: Heutiger Stand der Forschungen.' [Discussion of the views of Krogius and Kunz. The general distance-sense of the blind depends on the co-operation of the externalising activities of all the remaining senses; it is more especially a function of the sense of hearing (under which the reactions of the vestibular apparatus are to be included), and is at times reinforced by pressure and temperature. There is, however, a peculiar faculty, in the blind, of appreciating direction, distance, height, etc., which does not come to consciousness in terms of sensation, and which cannot be explained in the same way as their general power of orientation; the perceptions of this X-sense, as the writer terms it, depend exclusively upon the stimulation of the auditory organ by reflected sound-waves.] **G. Deuchler.** 'Bericht über den dritten internationalen Kongress für Philosophie zu Heidelberg vom 31 August bis 5 September, 1908.' Notiz. 'Die VII. internationale Kongress für Kriminalanthropologie.' Literaturbericht. Einzelbesprechungen. [Meumann on Stumpf's *Wiedergeburt der Philosophie*; Kronfeld on Nelson's *Ist metaphysikfreie Naturwissenschaft möglich?* and *Über das sog. Erkenntnisproblem*; Kiesow on Aars' *Gut und Böse.*] Referate.

Archiv für Systematische Philosophie. Band xv., Heft 1. **H. Guskar.** 'Der Utilitarismus bei Mill und Spencer in kritischer Beleuchtung. Eine Grundlegung für die Ethik.' [Their method fruitful if

the right start is made, not from an abstract principle, but from the conative life of man.] **Theodor Lessing.** 'Philosophie als Tat.' [Importance of the personal factor in the teaching of philosophy. To be a great philosopher one must have lived and suffered.] **Leonid Gabrilowitsch.** 'Über zwei wissenschaftliche Begriffe des Denkens: zur Grundlegung einer dativistischen Logik.' [Dativism opposes the view that regards thought only as *process*, the process namely of affirming or denying the connexion of certain psychological *Begriffsvorstellungen*. The meaning of every concept presupposes a firmly concatenated system.] **Georg Wendel.** 'Metaphysische Ausblicke.' **O. Hilferding.** 'Die Ehre. Ihr Wesen und ihre Bedeutung im Leben.' [Honour a natural necessity, a function and regulator of Egoism.] **R. Seligmann.** 'Zur Philosophie der Individualität.' [A series of propositions such as: Das absolut individuelle Moment muss als ein ewig Unfertiges gedacht werden, with elucidatory comments. The conclusion is that Pleasure points the way to perfection.] **Paul von Rechenberg-Linten.** 'Die Zeit.' [The movement from impulse to act is what we call thought, and time is the form in which it occurs. It rests on the power of memory with the perceived difference between the original condition of rest and the new state produced by the motion.] **Otto Neurath.** 'Ernst Schröders Beweis des 12 Theorems: Für die identischen Operationen gilt das "Kommutationsgesetz".' Jahresbericht: Die Rechtsphilosophie in Ungarn. Neueste Erscheinungen, etc.—Band xv., Heft 2. **Olga Hahn** and **Otto Neurath.** 'Zum Dualismus in der Logik.' [Refers to E. Schröder's lectures on the Algebra of Logic.] **Ernst Vowinckel.** 'Zum Problem der Persönlichkeit.' [The specific nature of Personality is its power of so meeting and diverting stimuli as to create new ethical contents, laws and ends. If men could live as a whole they would realise the transcendental ethical world.] **R. Seligmann.** 'Kausalität.' [Causality rooted in the Absolute. The "earlier" and "later" is of purely psychological origin.] **L. Couturat.** 'Expérience de double traduction en langue internationale.' **Bernhard Rawitz.** 'Über Raum und Zeit.' [Space and time are functions of our body, known only *a posteriori*. Importance of Cyon's investigations.] **Georg Wendel.** 'Systematische Philosophie und Einzelforschung.' **Arthur Fleischmann.** 'Über die objektive Existenz der psychischen Energie.' [An effort to meet objections, especially Busse's, to the recognition of a special psychical energy.] **M. Tramer.** 'Ein Versuch die Dreidimensionalität des Raumes auf eine einfache lagegeometrische Erfahrungsannahme zu stützen.' **Rudolf Witten.** 'Zur Kritik des Kritizismus.' [Shows the historical limitations of Kant's theory. Hume had confused empirical with logical necessity.] **Dr. Rohland.** 'Über Kausalität und Finalität.' Neueste Erscheinungen, etc.

Vierteljahrsschrift für Wissenschaftliche Philosophie und Soziologie. Jahrgang xxxiii. (Neue Folge viii.), Heft 1. **Willi Warstat.** 'Vom Individualbegriff. Ein Beitrag zur Geschichte der formalen Logik. Gekrönte Preisschrift.' [A review of the treatment of the subject by Kant, and, in the newer Logic, especially by Riehl and Sigwart.] **George Jaffe.** 'Über die räumliche Anschauungsform. Vierter Dialog zu Berkeleys drei Dialogen zwischen Hylas und Philonous.' [Conclusions drawn from the multiplicity of the forms of perception regarding the nature of geometrical knowledge. The empirical and *a priori* elements of geometry distinguished; postulation of a "raumbildende" and of a "raumdeutende" faculty.] **Paul Barth.** 'Die Geschichte der Erziehung in soziologischer Beleuchtung, viii.' [The educational theories of the German humanists, and their effect on Universities, etc.] Besprechungen, etc.

IX.—NOTES.

The following gentleman has joined the MIND Association since the printing of the July number:—

W. CARLILE, Hailie, Lipscomb, Surrey.

NOTES ON A NOTE.

There are some points of interest in Mr. Bradley's footnote on page 338 of the last number of MIND. As the note is short I may as well quote it in full:—

"To the question if the above principle is merely 'practical,' I reply 'Certainly, if you take "practice" so widely as to remove the distinction between practice and theory'. But, since such a widening of sense seems to serve no useful purpose, I cannot regard that course as being itself very 'practical'. I answer therefore that the above principle is certainly not merely practical."

The impatient reader, if he understands what pragmatism is, will naturally be inclined to dismiss this footnote as nonsense. Here, he will say, is Mr. Bradley imagining a question put in language which no pragmatist would use—for to talk of the 'merely practical' is to assume that the 'more than practical' exists. This question Mr. Bradley says he is ready to answer in the affirmative if the *questioner* will stultify it by assuming that the 'more than practical' does *not* exist. And then, after giving, irrelevantly, a reason for not being willing to 'remove' the distinction between practice and theory, Mr. Bradley proposes to answer the question with a simple negative—an answer which avoids all explanations, and is therefore one which might equally well be made by a pragmatist on the ground of the false assumption which the question implies. No wonder, the reader will say, that if this be a specimen of the efforts Mr. Bradley has made to discover whether he "is and has always been" a pragmatist, he has hitherto failed to solve that simple problem.

But if we are more patient we may get at some of the sources of Mr. Bradley's confusion. The word 'merely,' for instance, has evidently something to do with it. One knows that the too free employment of this word is a common result of the (intellectualist) habit of using abstract distinctions as if there could be no doubt about their application. Readers of MIND will remember some instances collected by Dr. Schiller (N.S., No. 52, p. 528), in which Mr. Bradley had gratuitously introduced a 'mere' or a 'merely' into pragmatist doctrines, and had thereby given a false account of them. If it had not been for his faint-hearted decision that Dr. Schiller's writings should no longer "attract his attention" he might by this time have learnt his error.

Another probable source of the confusion would also have been avoided by any one who had chosen to instruct himself in the pragmatist writings. Such a reader would understand the slovenliness of any talk about 'removing' a distinction. He would be familiar with the view that a distinction is always a tool with a use of some kind, but a tool that is also liable to be misused; and that therefore the problem is to discriminate between the use and abuse of it, to reserve our trust in it for the occasions on which it is unlikely to mislead, and to criticise as sharply as possible the use of it on any other occasions. Whether he agreed with this view

or not, he would know that the pragmatist method is full of it. Pragmatists do not first 'remove' a distinction, and then by an afterthought (if at all) ask whether such removal serves any useful purpose; what they do is, first, to judge (rightly or wrongly) that for certain purposes, which the context indicates, a distinction otherwise useful does not hold good, and then to object to the use of the distinction for those purposes and openly on that ground. The relevant way of answering this contention, therefore, is to attack the judgment involved in it, and not to pretend that the 'removal' has been suggested at random.

The pragmatist has allowed himself to recognise, quite generally, that the value of distinctions is liable to vary with the varying purposes for which they are used. Mr. Bradley, though here and there like every one else he may admit such variations, seems for the most part more attuned to the easier view—the view encouraged also by formal logic—that questions about particular cases are tiresome and negligible; so that a distinction must be either valid or not valid, either kept and trusted or else 'removed'. A spade, we all agree, is either fit for use or fit for the dustheap; and the easy, natural, abstract view of distinctions treats them in a similar way.

On the whole, then, the footnote quoted above has some value as throwing a further light on Mr. Bradley's controversial methods, and as therefore providing a further object-lesson in the ways in which a controversy should not be conducted if a good effect is desired. This may also help to remind us that though Mr. Bradley is certainly not yet a pragmatist, he has at least indirectly and unintentionally done a great deal for the advancement of the cause.

ALFRED SIDGWICK.

THE ROOTS OF REALITY: REPLY.

As Mr. Bax has directly challenged my criticism of his book, *The Roots of Reality*, I am perhaps bound to reply, but my reply need not take up much space. For, as regards the first of the two issues to which he refers, I do not see that his explanation really removes my difficulty. He speaks of his primordial Subject as the "ultimate Matter of all perception," and I can only repeat that a Matter which is the *correlative* of Form cannot also be *prior* to it, temporally or otherwise—formless matter being as unreal as matterless form. And, as regards the second issue, Mr. Bax's remarks are wholly based on a misunderstanding, for which, however, I appear to be myself responsible. I did not mean to assert any actual or psychological existence of the "universal consciousness," and apparently I ought to have said so more explicitly. I merely used this conception as the simplest device for expressing the nature of knowledge so far as that nature is independent of the limitations inseparable from the finitude of the individual knower. But I could have stated my criticism well enough, I daresay, by saying that what is alogical for A or B here and now is not therefore destined to remain so for all men for all time coming; or, again, by saying that we have no right to transfer, as we do if we use such a notion as Chance, the deficiencies of our knowledge of reality to the reality itself. The "alogical," in fact, seems to be no more than a symbol for the limitations of actual knowledge. It was, of course, for this reason that the "principle" seemed to me "unsatisfactory" (though I do not use a phrase of this kind "more than once") when offered as a solution of any concrete problem. And I quoted, though perhaps without sufficient commentary, four applications of the principle from which, I thought, the reader could judge for himself whether my subsequent expression of opinion was justified.

H. BARKER.

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